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Original Articles.

REPORT OF A CASE OF FRACTURE OF BASE OF SKULL WITH MIDDLE MENINGEAL HEMORRHAGE BETWEEN DURA MATER AND THE SKULL.*

By Edgar Brandon, M.D.C.M.

Resident House Surgeon Toronto General Hospital.

Extravasation of blood within the skull necessarily occurs in all cases of injuries of the head accompanied by laceration of the brain, and in many in which the skull is fractured without wound of its contents. This is due to the great vascularity of the parts within the skull, the large sinuses, the numerous arteries that ramify both within the bones and at the base of the brain, and the close vascular network spread over the surface of the organ. The hemorrhage may be due to fracture, in which the fissure tears across one of the meningeal arteries, or a fragment of bone wounding a sinus. In many cases the inner table only has been fractured, and the middle meningeal artery is thus torn as it lies in a groove in the bone.

Hemorrhage may occur in four situations: (1) Between the dura mater and the skull, when it proceeds from a wounded middle meningeal artery, or, more rarely, from a sinus; (2) in

*Read at the regular monthly meeting of the Post-Graduates' Society of Toronto.

the subdural space; (3) in the subarachnoid space and in the meshes of the pia mater on the surface of the brain; (4) in the substance of the brain or in the ventricles.

As the time at our disposal will not permit us to take up a discussion of the points in connection with these four situations, and as the case we present to-night comes under the first classification, we shall, therefore, confine ourselves to that form of hemorrhage which takes place between the dura mater and the skull proceeding from a wounded middle meningeal artery.

Now, extravasation of blood between the dura mater and the skull is much less common than that due to injury or laceration of the cortex, which is by far the commonest, but has the distinctive feature that when it does occur the quantity is often quite large. However, even here the quantity is not very large in the great majority of cases, but, as we shall see later on, the case we are about to present quite exceeds any amount recorded, so far as we have been able to ascertain.

Symptoms.—The only certain definite symptom of extravasation of blood is gradually increasing paralysis and insensibility, ending in coma within twenty-four hours of the injury. In a typical case there are three distinct stages, viz.: (1) Concussion following the injury; (2) a temporary return to consciousness and a continuance of the same for a time; (3) coma gradually supervening.

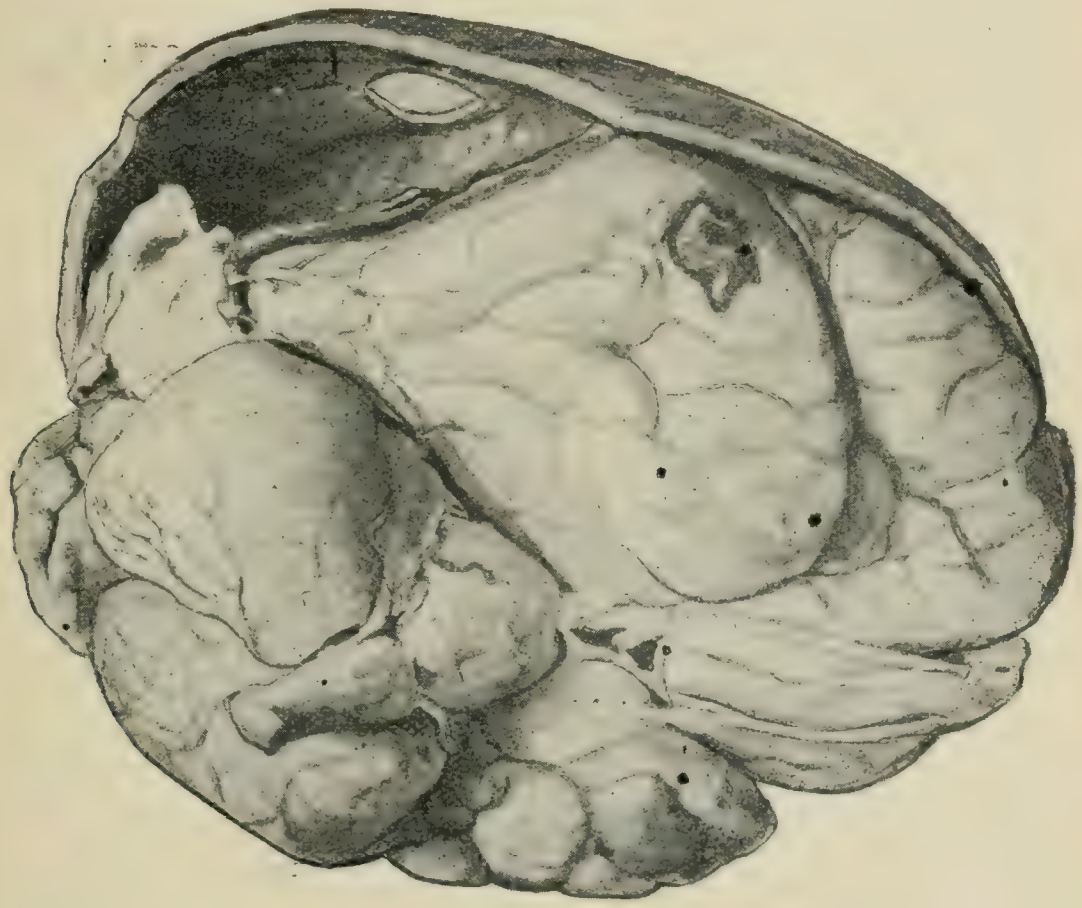
As accessory signs the following may be mentioned: (*a*) Paralysis, often preceded by twitching of the muscles, if the clot be over or close to the motor area; (*b*) certain eye symptoms, such as passive congestion of the eyeball, pareses of some of the ocular muscles and protopsis, with dilated pupil, all due to pressure of the clot on the cavernous sinus, when the extravasation extends to the base of the brain; (*c*) where a fissure exists in the bone, blood may filter through into the temporal region and produce a marked bulging or fulness there.

The amount of concussion or stunning varies, depending upon the severity of the cause, ranging from a slight momentary giddiness and confusion of thought to the most profound insensibility. The period of consciousness is generally of short duration, often only an hour or an hour and a half, sometimes, even, much shorter, the concussion rapidly passing into compression almost without an interval, depending upon the amount of, and the rapidity in which the blood is extravasated. The following case will illustrate.

The patient, J. B. H., was brought into the Toronto General Hospital, Tuesday, December 18th, 1903, at 11.30 a.m., by the

police ambulance, with an incomplete history of having been injured by the street railway the day before. A complete history of injuries was not ascertained till a few hours before his death.

He was examined hurriedly by Dr. McCauley and myself while waiting to be admitted. We found that the left arm was completely paralyzed, but that there was an incomplete paralysis of the left leg, inasmuch as he was able to move the leg and knee



Specimen of brain in skull-cap showing depressed brain, separated dura mater, trephine openings and hemorrhage into right temporo-sphenoidal lobe.

slightly, and as he resisted Dr. McCauley in his manipulation of the leg. His eyes were closed and the breathing was stertorous. There was inequality of the pupils.

He was sent up to the ward and I examined him about twelve o'clock. The patient was a heavy set, well-nourished man about five feet ten inches in height, weighing about 190 pounds, iron grey whiskers and hair. He lay with eyes closed and breathing in a stertorous manner. He had no control of

the left arm whatever; lifted from the bed it fell back limp and useless. There appeared to be very slight movement in left foot, but otherwise he had no control. Patient was conscious, as when I asked him to move his right arm he did so without any difficulty. He was also able to move the right leg without any difficulty when asked to do so. Asked to squeeze my hand with his right, he did so, exerting a fair amount of force. He was unable to open his eyes, having no control of his eyelids. The pupil of the right eye was dilated, not fully, but reacted to light. The pupil of the left eye was contracted down to a very fine pin point size, but also reacted to light. There was no hemorrhage from the ears, nose or mouth.

He spoke in a mumbling, non-fully articulated way, and at times it was very difficult to understand him, showing that his speech centre was evidently affected. The patient, when asked to put out his tongue, did so. It did not protrude markedly to any one side, but on retracting was drawn over to the right side.

Patient seemed quite conscious of all that was going on about him, and answered questions put to him, though his answers were sometimes unintelligible. He also inquired as to why I did certain things, such as the testing of his pupils. I examined him for bruises, and found one in the left anterior tibial surface about three or four inches from the foot. He also had a bruise on the lower lip in the centre, wedge-shaped in character, with apex at the alveolus, which he told me was due to his injury. There were also scratch marks on his cheek and nose. I examined him for signs of a fracture, but made out none. A bruised area was afterwards disclosed upon the right temporal region, extending backwards and downwards to tip of the mastoid. Otherwise patient had no evidence of injury.

I drew off the urine, with the result of only a few ounces, which, on examination, I found to be normal.

His temperature per axilla was normal, pulse 70, respiration 30. He was given croton oil followed by mag. sulph, one-half ounce every hour for seven doses, without effect, when croton oil was repeated, followed by mag. sulph., which was effectual. During day took nourishment and swallowed without any great difficulty.

Temperature at 7.30 p.m., 100 deg., pulse 90, respiration 28. What little movement there was in the left foot had disappeared, and at 8 p.m. the nurse had made the observation: "Had very little difficulty in swallowing, knew all that was

said to him; during night was uneasy, moaning, and throwing the bed clothes off."

Next morning, December 10th, his condition had not improved. He was still as conscious as previously, but his respirations were more rapid, heavy and sonorous, about 36 per minute, his pulse 90, temperature 101 deg. During the day his condition did not improve, and the next day he was worse, temperature 102 deg.; pulse 106, weak and intermittent; respiration, 44, heavy, difficult and stertorous. In the afternoon he had involuntary movements of urine and feces, was unconscious, markedly cyanosed, breathing stertorously and with marked rattle in throat, head inclined to right side, pulse very weak and thready. Dr. Baines, who had charge of him, advised me to bleed him, which I did, taking away some eight or ten ounces with difficulty. Stimulants, strychnia, digitalis and ether were used with the result that the cyanosis somewhat lessened.

I may say that during the afternoon his wife was present, and she gave us the complete history, which we heard for the first time. She stated that his waggon was struck by the street car and he was pitched out. We have since, however, learned from the inquest, etc., that he was found with his heels in the waggon and his head on the pavement. He was assisted to his feet, and he stood at his horse's head and quieted it while his effects were being gotten together. She also stated that he walked from King Street to Bloor Street, a distance of some miles, went to his home and undressed himself, and retired. During the night the paralysis came on.

Dr. Fotheringham, passing through the ward, saw him and thought he should be seen by a surgeon. Dr. Peters being in the building, I asked him to see him, and after examining him and hearing his history, above related, he thought there was evidence of meningeal hemorrhage and advised trephining. I consulted with Dr. Baines, who concurred. Dr. Peters operated upon him at 6.40. He cut a horse-shoe flap over the right temporal region, disclosing considerable sub-aponeurotic hemorrhage, with clotting. The trephine was then introduced over the upper right rolandic area, and the bottom being removed, clotted blood was discovered. Dr. Peters put in his finger, but could not find the dura mater. He began pulling out the clotted material, and again was dissatisfied with the result. A further trephining was done an inch and a half below and behind the right parietal eminence, again disclosing clotted material. After a time the clotted material, weighing eight or ten ounces, was removed, and resulted from the following condition: The dura

mater was seen to be separated from the calvarium and the hemorrhage coming from the anterior division of the middle meningeal artery had separated the dura and gradually increasing in quantity, had pressed and crushed the brain substance before it downward, forward and backward. Oozing could be seen from the wounded artery, which was controlled with ease.

The compressed brain did not expand, and remained in the condition which we see in the specimen. The wound was packed with iodoform gauze and the patient removed to the ward. During the operation, which was done without anesthetics, the patient showed slight signs of reaction, but his respirations became more and more labored and stertorous, his pulse throughout the operation was very difficult to get, and the result was that he died half an hour after he was removed to the ward.

J. B. H. (P. M.)—Nutrition good, rigor mortis well marked, post-mortem staining on dependent parts. Inspection: Slight bluish discoloration about the chin, no ebrasion; scratch marks are visible on nose, cheek and ear of the right side. There is a bluish discoloration in front of the left ear, also some fulness in right side of neck from angle of the jaw to the mastoid portion of the temporal bone, gradually tapering as it descends into the soft tissues of the neck. Bluish discoloration noted over this swelling. Noted a crescent-shaped incised wound in scalp extending from two inches above and one inch in front of the occipital protuberance. Middle of right arm, bluish discoloration one and three-quarter inches by one and one-half inches. Front of right elbow, venesection mark. Outer side of right knee, an abrasion is noted. Another abrasion is noted at upper and inner aspect of left leg two and one-half inches in length. There is also an abrasion, size of a twenty-cent piece, at outer side of head of fibula of left leg.

Head.—On removing scalp there was found some dark effused blood, especially well-marked at the sight of swelling previously described. Also noticed two trephine wounds. Noted a fracture extending from parietal eminence downward and forward three inches, this just below the swelling previously described. On removing skull cap, dura is seen to be depressed one and one-half inches from the inner table in the right side, extending from a point midway between the glabella and occiput to the petrous portion of the temporal bone in its vertical axis, and in its transverse axis from a point one and one-half inches above centre of Reid's base line to the occipital pole. Removing brain, hemorrhage is noted below the tem-

poral sphenoidal lobe in front and right side. Hemorrhage in the pia-arachnoid into the frontal lobes. Slight hemorrhage on under surface of right frontal lobe along the course of the olfactory nerve.

Base of Skull.—There is a fracture from the parietal eminence extending downwards, outwards and forwards, crossing the lateral sinus back of the fossa sigmoidea and turns inwards and passes forwards, ending in fossa one-quarter inch to foramen lacerum posticum.

Section.—On section, anterior abdominal wall three inches in thickness, two inches of which was fat.

Omentum.—Shows a large amount of yellow fat, overlies the liver and front of stomach.

Peritoneum.—Normal.

Pleura.—Right: Firm old adhesions behind, in front and below. Left: similar adhesions in front, above, below and behind; diaphragmatic adhesions.

Pericardium.—Slight adhesion between the pericardium and pleura on right side; contains bloody colored serum, one-half ounce in amount. Heart weight, 13 ounces. Surface of heart shows small clot plugging a small vessel at the auriculo-ventricular septum. Right side is engorged; pulmonary artery, muscle firm, slightly paler than normal; patchy atheroma of aorta. Coronary arteries—orifices free; fairly well-marked sclerosis of coronary vessels.

Lungs.—Right: weight, 29 ounces; anteriorly fairly well-marked emphysema; well-marked hypostatic pneumonia with edema, stage of splenization, friable. Left: weight, 21 ounces; hypostatic congestion and edema, very friable.

Spleen.—Normal, weight 2½ ounces.

Kidneys.—Right: 6½ ounces; large amount of perirenal fat, capsule slightly adherent; kidney substance pale, cortex narrowed, ureter normal. Left: 6¼ ounces, otherwise same as right.

Pancreas.—Normal.

Intestines.—Normal; mesentery diffuse lipomatosis.

Stomach.—Lining shows some chronic congestion.

Liver.—53½ ounces, pale, friable and fatty.

Gall-bladder.—Passages free; normal.

The mechanism of meningeal extravasation is very interesting to note, and has given rise to much discussion. It is very evident, from experiments performed, that there must be a separation of the dura from the skull, due to fracture or violence applied, and that the extravasation is consequent on that separa-

tion. I may here quote from Sir Charles Bell's "Surgical Observations" (London, 1816) : "It is extraordinary that any one who has ever raised the skull cap in dissection and felt the strength of the universal adhesions of the dura mater to the lower surface of the bone, could for an instant believe that the arteria meningea media has power of throwing out its blood to the effect of tearing up these adhesions from the entire half of the cranium." Here, to substantiate his statements that the dura mater is first of all separated from the skull and that the extravasation is consequent upon that separation, he goes on to describe the following experiments: "Strike the skull of the subject with a heavy mallet; on dissecting you find the dura mater to be shaken from the skull at the part struck. Repeat the experiment on another subject and inject the head minutely with size injection and you will find a clot of the injection lying betwixt the skull and the dura mater at the part struck and having an exact resemblance to the coagulum found after violent blows on the head." This would apparently appear to be conclusive, but to carry it further in cases of fracture, such as occurred in this case, there are also, apart from the blow or injury which must necessarily have been received to produce a fracture, certain alterations in form of the skull accompanying the blows which tend to lessen the attachments of the dura, there always being a certain amount of play bebetween the edges of a fracture sufficient to lessen a certain small amount of the dura from the skull.

The dura mater being separated from the skull to a certain extent, how does it come about that such a very large surface of the dura is separated? Simply that the blood is poured out in sufficient force and in ever-increasing amount to strip the membrane from the bone, because it is very difficult to conceive that that membrane can be shaken from the base of the skull by a blow in the parietal region, and yet meningeal hemorrhage often extends as far as the cavernous sinus. Once the blood is forced in it acts on the principle of the hydraulic press.

The hydraulic or hydrostatic press depends upon the equal transmission of fluid pressure, viz., "that the pressure exerted anywhere upon a mass of fluid is transmitted undiminished in all directions, and acts with equal intensity upon all equal surfaces and in directions at right angles to these surfaces." Thus by a simple hydraulic press a large weight was supported through the column of water by a much smaller weight and in inverse proportions to the ratio of their areas. This, in turn, gives rise to the hydrostatic paradox in which, by decreasing the

smaller area indefinitely and increasing the larger area indefinitely, any force, however small, applied to the smaller area may, by transmission of pressure through the fluid, be made to support upon the greater area any weight, however large. Now, here we had the heart pumping blood through the artery into a closed cavity, and as the cavity enlarged so did the force increase.

Now, taking the pressure in an artery to be two pounds to the square inch, when four square inches of dura are separated we have a pressure of eight pounds pressing against it; when it is separated for three square inches in each direction, or nine square inches, the pressure equals eighteen pounds. The area of dura mater stripped off in this case we have just cited was measured and found to be five inches long antero-posteriorly, one and five-eighth inches in its greatest transverse diameter, and a greatest vertical diameter of one and one-eighth inches. This is approximately estimated to be about twelve square inches. We should, therefore, estimate that there was a force of twenty-four pounds exerted against the brain. The only resistance against this was the adhesion of the dura mater to the skull and the blood pressure in the capillaries of the brain substance. It is, therefore, not very surprising that we get such very marked effects from the force exerted by the escaping blood, and it is no great wonder, indeed, that the brain, so soft and delicate and so easily injured, becomes compressed into a small space and fails to expand when that pressure is removed.

There are a few further points of interest that I should like to draw attention to in regard to this case, points which are very remarkable and very extraordinary, indeed, when one considers the case in all its details:

1. The remarkably slight amount of concussion. After the accident he was found with his feet at the top of the waggon box and his head on the pavement. He was in somewhat dazed condition when assisted to his feet, but was able to go to his horse's head and quiet him while his effects were being gotten together. He subsequently was able to walk from King to Bloor Streets, a distance of about one and one-quarter miles, and after reaching his home to undress and retire.

2. The remarkably slow onset of symptoms and the great length of time elapsing before coma supervened. As we have stated, he was injured during the afternoon and walked home, during the night the paralysis on the left side came on. When brought into the hospital at twelve the next day he was still conscious of everything. Coma did not set in for a few days

and not till a few hours before his death. The interval of consciousness in most cases is variable, but seldom extends beyond an hour and a half. Ericksen describes a case that did not become unconscious for three and one-quarter hours. Treves states that an interval of two or three days may elapse before compression symptoms set in. In this case, however, consciousness lasted for between two and three days after the accident, though the paralysis came on some eight or ten hours after the accident. The explanation may be found in that either extravasation was very slow and the adhesions between the dura and the skull very strong, or that the hemorrhage ceased and was lighted up again by subsequent exertion, such as the long walk he took. Mr. Towers, in the *Lancet* for August, 1903, describes a case in which compression symptoms did not come on for fifty hours after the accident, but this he explained by the fact that the patient struggled violently with an attendant in endeavoring to get out of bed, and so restarted hemorrhage, which had stopped.

3. Large amount of clot. The quantity seldom exceeds four ounces; five and one-half ounces was the most Ericksen had seen. In this particular case I measured eight ounces myself, and there was considerable removed subsequently, so that there was at least ten ounces of clot removed. As shown in the drawing, a cavity was left between the brain and the skull almost large enough to hold one's fist.

In conclusion, I should like to briefly review the case, and at the same time dwell upon the great importance and value of getting a complete history of every case that comes to one. This unfortunate man was sent into us with the supposition that he had an apopleptic seizure during the night previously to his admittance. No one came with him but the ambulance men, and they knew nothing more about him than that he had some slight accident, and had gone home apparently little the worse of the accident. We never heard what really had happened to him till a few hours before his death, when his wife gave us the details previously given. It is needless to say that, had he been trephined shortly after being admitted, his chances for recovery would have been very much better, indeed. With a complete history, the case was very typical of meningeal hemorrhage. He had the initial slight amount of concussion, with the interval of consciousness lasting for some days, the gradual onset of compression signs while still conscious of everything, and coma, with death supervening in spite of all that had been done to save him.

WOOD ALCOHOL.

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"*Poisoning by Wood Alcohol—Cases of Death and Blindness from Columbian Spirits and other Methylated Preparations.*" Such is the title of an address presented by Dr. Buller, of Montreal, and Dr. Casey Wood, of Chicago, before the fifty-fifth annual session of the American Medical Association, in the section of ophthalmology. The reprint from the *Journal of the American Medical Association* was sent to me in consideration of assistance given the above distinguished men in framing material for address and report.

In all some seventy-two cases are reported of total blindness and death, Dr. Buller furnishing some five or six cases, attributable to the use of wood alcohol or one of its many preparations, of which Jamaica ginger, Florida water, lemon essence, etc., afford but few illustrations. That deaths are so frequent from its use is attributable to laws against the use of grain alcohol, and such states in the United States which have prohibition, and other laws in opposition to the sale of alcoholic stimulants, have the greatest death rate. In one of the cases reported, Jamaica ginger, lemon essence, and "Peruna," occasioned a spree, with the results: blindness and death.

The reprint contains thirty-five pages, which is worthy of the interest of every M.D., in fact, of the interest of everyone.

I submit from page 24 the following (although the whole address should be read very carefully by every M.D., who should convey to his newspaper much of the information therein contained in regard to the deadly methyl alcohol):

Total Number of Methyl Alcohol Victims.

From Dr. Buller's tables of published histories we have a well-authenticated list of fifty-four cases of methyl alcohol amblyopia, to say nothing of the deaths that are incidentally mentioned, of which no particular record was made. As the proportion of deaths to survivals with blindness is a fairly constant one, and reading the reports intended to describe blindness only, we may put down forty as the minimum number of published deaths.

Reference has already been made to the experience of Dr. Moulton with deaths from wood alcohol on Indian reservations.

Other ophthalmologists tell the same story about these "strictly preserved" localities. One observer, who has reported several cases of methyl alcohol amaurosis, says regarding them: "Almost the first question I ask an amblyopic patient from a reservation is, What have you been drinking? The answer almost invariably is, Columbian spirits, Jamaica ginger, or something of that sort. It is no trouble to find the deleterious effects of methyl alcohol among these people. As for Indians, they will drink anything they think has alcohol in it, even red ink."

Nor is the consumption of methylated compounds as a substitute for ethylic alcohol confined to Indian reservations. Whereever men in any walk of life are deprived of a chance of indulging in the usual forms of ethylated beverages, they are very likely to drink some tempting form of methylated mixture. Assistant Surgeon X. writes me: "The temptation of the men of this post is particularly great, as we are over ten miles from the nearest saloon. At the time the deaths occurred the men, having consumed all their grain alcohol, had to have something to 'sober up' on, so they got hold of Columbian spirits and drank it, hardly knowing or caring what they were taking." Perhaps if the United States Army had been supplied with a properly regulated canteen, where light wines and good beer were sold, these soldiers would have "sobered up" on non-poisonous drinks and not on wood alcohol!

The list of previously unrecorded cases of blindness, so far as Dr. Wood has been able to collect them, includes 89 well-authenticated cases from the drinking of methylated liquids. Absorption of the fumes is responsible for ten instances of amblyopia, while the deaths (without history of previous blindness) number 82. Altogether, then, we have 153 instances of blindness and at least 122 cases of death from methyl alcohol poisoning during the past few years—275 in all.

Our reasons for believing that these figures by no means complete the roll of serious intoxication from this poison we have already pointed out. How many cases of death and blindness (or both combined) have resulted from methylated preparations since the comparatively recent introduction of Columbian spirits is a matter of conjecture; probably 400 instances.

Since this article went to press, the newspapers report the deaths of twenty-five persons in a certain district in New York city from drinking whiskey which contained wood alcohol and which was purchased in a saloon. The newspaper account continues: "The police to-night arrested Rudolph Fritsche, the proprietor, and closed the place. A chemical analysis of the stomach

of one of the victims, who died of acute gastritis, showed the presence of wood alcohol, which also was found in a bottle of whiskey purchased at the saloon."

Commercial Forms of Methyl Alcohol.

Although that nauseous and vile-smelling fluid is still purchasable as wood alcohol, wood spirit, pyroligneous spirit, wood naphtha and methylated spirit, its place in commerce has been almost altogether taken by the deodorized variety, of which "Columbian spirits" is easily the best known and most widely used. There are many other forms of this fluid on the market, such as "colonial spirits," "union spirits," "eagle spirits," etc., in the United States. "Green wood spirits" (mostly used for fuel) and "standard wood spirits" (a more thoroughly deodorized article) are largely sold in Canada, and intended for the came purposes as the American Columbian spirits. The deodorized fluids all have the same volatile, agreeable, vinous odor, and the pungent, biting taste, as pure ethyl alcohol, and it is often difficult for the average individual to distinguish them from grain alcohol. It is, therefore, quite easy to understand how the thirsty one, unaware of the danger to life and eyesight, might indulge in a drink of the methylated product. Manufacturers of all sorts of alcoholic potions have not been slow to take advantage of this fact; indeed, there is hardly a "liniment," an "essence," an "extract," or a "bitters"—hardly any nostrum or concoction, medical or domestic, in whose preparation alcohol is employed—that has not been, or is not now, adulterated with this poison. We have, within the past few months, had several proprietary remedies, suspected to have produced blindness, carefully analyzed; they all contained wood alcohol.

As stated on the highly ornate labels of the bottles intended for retail consumption, one form of methylated "spirits" is highly recommended for "bathing, burning, and cleaning." Among the uses specified are: "Bathing and sponging the sick; making liniments; rubbing for rheumatism, bedsores, etc.; veterinary uses, where alcohol is required; Turkish bath cabinets; burning under chafing dishes and in spirit lamps; removing oil and grease from brass and wood-work." In all these instances ample opportunity is afforded for absorption of the poison.

A few instances—there are hundreds of others—of the use of "deodorized" wood spirit as an adulterant of or substitute for grain alcohol may be given:

In the 1903 report of Dr. R. O. Brooks, state chemist of New Jersey, it is shown that from four to eight samples of paregoric

and from four to eleven samples of ginger contained wood alcohol—a fact that would seem to indicate that drug adulteration with wood alcohol is still practised to a considerable extent.

Scoville* reported that he found two out of six commercial liniments containing wood spirit; also the same poison in several brands of witch hazel.

Dr. Allen Greenwood, of Boston, found quite recently that two of his patients had been furnished tinctures whose menstruum was "Columbian spirits." The druggist, on being called to account, stated that many tinctures are now being made with "spirits" of this kind!

The president of the New York Board of Health ordered, in 1902, an examination of the ingredients in the Jamaica ginger and spirits of ammonia sold by druggists throughout the city. The official chemist found that 40 out of 215 drug stores were substituting wood alcohol for grain spirits. Warrants were issued for these offenders.

Dr. Warren, the pure food commissioner of the State of Pennsylvania, reports that to Feb. 5th, 1904, he had collected and examined 1,000 samples of cheap whiskey from all parts of the state. Over 95 per cent. of the samples contained varying quantities (some as high as 75 per cent.) of wood alcohol. He believes that 5,000 cases will be found in the state, and is determined to prosecute them.

In 1902, E. L. Patch, of Stoneham, Mass., reported to the American Pharmaceutical Association that he found wood spirits in 40 out of 225 samples of spirit of camphor.

Without further multiplying examples of this brazen attempt at wholesale poisoning, we finally present a recent report of the dairy and food department of the State of Minnesota, who condemned and pronounced illegal, because of their containing wood alcohol, samples of lemon "extract" from all parts of the state. These poisonous products were put up and sold by wholesale manufacturers of (?) respectable standing in Chicago, St. Paul, Minneapolis, Duluth, and Milwaukee. In addition to this list they also found four cases in which methyl alcohol was used in the manufacture of Jamaica ginger, two cases of vanilla extract, one of pineapple, and two of strawberry.

Toxicity of Methyl Alcohol.

While a study of the cases reported in this article must undoubtedly establish the fact that the majority of those who imbibe a moderate quantity—say two or three ounces—of wood alcohol

*Mass. Pharm. Assn., 1897.

or its equivalent of methylated liquids, escape permanent damage, *i.e.*, most persons are, to some extent, immune to serious poisoning by small quantities of methyl alcohol, this is by no means true of larger quantities; nor does it, by any means, prove the immunity of every person from poisoning by very small quantities. Until the experiment has been made, nobody can be assured of safety to eyesight from the ingestion of much smaller amounts of the poison. There are many well-authenticated instances in which the drinking of a couple of teaspoonfuls of wood spirits was followed by blindness.

The intoxication of persons from inhalation of the fumes of methylated alcohol is another example of poisoning by small quantities of the intoxicant, because the actual bulk of liquid so absorbed by the lungs and skin must be comparatively small.

The cumulative quality of methylism has been referred to by several writers. This matter will be further discussed in speaking of the pathology of the subject. Meantime our investigations undoubtedly demonstrate that in many instances no marked poisonous symptoms were noticed until twenty-four hours or longer, after the last of a number of doses (usually small "drinks") had been taken. Unlike most poisonous agents that are responsible for acute symptoms, these may not much disturb the patient for a relatively long interval after the ingestion of the poison. Indeed, it may be set down as a rule that, except in persons exhibiting an idiosyncrasy against wood alcohol, or unless a large dose of the poison is drunk within a few hours, not only may the severe abdominal symptoms, the cardiac and nervous collapse and the blindness be postponed, but even the fatal termination has, in some instances, been delayed for several days.

This information, derived from the histories just published, demonstrate the fact that there is danger, albeit an unknown degree of danger, to life and eyesight attending the ingestion of *any* amount of wood alcohol. Moreover, while the acute, unmistakable symptoms of the ordinary forms of intoxication enable us to recognize them at once, there can be no doubt but that much smaller quantities, taken into the system, as methylated quack remedies, adulterated foodstuffs (Jamaica ginger, "lemon extract," essences), or the secret dram drinking of bay rum, cologne water, etc., may, in persons not immune, injure the digestion and permanently damage the vision.

There are very few poisons that more distinctly exhibit the selective character of the intoxication than wood alcohol. It has again and again been demonstrated that a minority of those who imbibe methylated fluids suffer no permanent damage from

them. In other words, many people are practically immune to moderate doses of methyl alcohol. In most cases where small doses are taken, serious intoxication means that there is in the poisoned individual an idiosyncrasy against this agent. It is owing to this fact that in times past many perfectly sincere observers asserted, and interested parties loudly proclaimed, the innocence of methyl alcohol. During the trial of the Baltimore suits against Gilbert & Co. a dramatic incident occurred, based on this belief. A chemist drank a quantity of methylated spirits in open court. Of course, we now know that, although this was a dangerous act, the chances were greatly in favor of the witness, especially if at the time his stomach were full of food, or if he took an emetic shortly after the draught of wood alcohol.

Prof. W. A. Puckner, in the *Western Druggist* for December, 1897, wrote:

" The only constituent of wood alcohol likely to be present in sufficient amount to be poisonous is acetone, and, since methyl alcohol is comparatively free from this, the preparations now in the market are presumably also free from the poisonous properties ascribed to wood alcohol."

Supporting this proposition, he took internally single 30 c.c. doses of a commercial wood alcohol containing about 0.5 per cent. of acetone, and experienced no unpleasant results therefrom.

" Further doses of 15 c.c. taken at intervals of thirty minutes until 90 c.c. had been drunk, left the body temperature normal, at first somewhat accelerating, later slightly depressing, the pulse, *i.e.,* producing the characteristic effects of ethyl alcohol."

On the other hand, Dr. Reid Hunt,* of Johns Hopkins, showed that, in experimenting on dogs, the latter were all killed by doses of Columbian spirits and other fluids containing methyl alcohol, while animals survived the same and larger quantities of ethyl alcohol and pure acetone.

In considering the actual poisonous agent in the methyl alcohol of commerce, one must not forget the secondary organic compounds formed in the intestines and in the blood. It is quite likely that these play an important rôle in the damage inflicted on the system.

Those interested in this subject had better write to Dr. Buller for the address, or read my article in *The Daily Star,* Toronto, which, at length, with notes, deals with this subject, and cites several cases.

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*Toxicity of Methyl Alcohol, 1903.

Selected Article.

THE BRADSHAW LECTURE ON THE TREATMENT OF ENTERIC FEVER.*

By F. Foord Caiger, M.D. (Lond.), F.R.C.P. (Lond.)

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Mr. President and Gentlemen,—My first duty is to express my grateful appreciation of the honor which the President has done me in deputing me to deliver this lecture. In my choice of a subject I have been guided by the President's wish that it should be one more or less identified with my daily work, and I have, therefore, selected the treatment of enteric fever as seemingly not inappropriate.

During recent years a great deal has been said, and still more written, as to the treatment of typhoid fever, and that by some of the most eminent members of our profession. It is not unnatural, therefore, that I should feel some diffidence in bringing the subject before you on this occasion; and yet, when one reflects that our case-mortality to-day remains at a height of more than 15 per cent., and that in this country alone some five or six thousand persons annually die from the disease, I feel that it is not, perhaps, without some justification that I venture to recall your attention to the important question of its treatment. To attempt to deal at all exhaustively within the time at my disposal with a subject as wide as that of the treatment of enteric fever would be manifestly impracticable, for, in addition to a discussion of numerous measures of a directly remedial character, it would involve the careful consideration of various points of no less importance in connection with the dietary and the nursing of the case. Moreover, the subject is one which has, perhaps, offered a wider field for discussion and been a source of greater difference of medical opinion than in the case of any other disease. I propose, therefore, to confine my remarks entirely to the field of therapeutics, with special reference to various measures which, as the result

*Delivered at the Royal College of Physicians of London on Nov. 15th, 1904.

of my experience, I have come to regard as worthy of some confidence.

From a therapeutic point of view, it may be stated broadly that the treatment of a case of enteric fever will probably be conducted on one of two well-recognized lines—an active remedial method, or a passive, or so-called expectant, method, each of which has its firm adherents. But whether we favor the exhibition of remedies having for their object a direct interference with the natural course of the disease or whether, as is so much the fashion to-day, we adopt an expectant attitude and are content to restrict our efforts to combatting individual symptoms in the event of their assuming a threatening aspect, and to relieving any complications which may arise during the course of the illness, the fact must never be forgotten that the treatment of enteric fever is not merely a matter of therapeutics, but implies the general management of the case.

Now, it may be asserted generally that our management of any case of serious illness is likely to be successful in proportion as it is adapted to the special circumstances which characterize that attack, due regard being given not only to the underlying morbid process, of which certain of the symptoms are the recognized expression, but also to the personal factor which in some instances contributes so largely to the general aspect of the case; and to this rule enteric fever is no exception. Experience clearly indicates that what is best for one patient may not necessarily be so for another, and that the best results will be achieved, not by a slavish adherence to any particular method of treatment, to the exclusion of others, but by the adoption of such measures as seem best adapted to the idiosyncrasy of the individual patient and the particular type of his attack.

The methods of treating enteric fever by means of remedies which are assumed to be capable of exerting a direct controlling influence over the natural course of the disease may be appropriately referred to as either (1) specific, (2) antipyretic, or (3) antiseptic, according to their conception and to the nature of the agents employed, and they may conveniently be discussed under these headings.

1. First, as to specific treatment. The remarkable success which has attended the treatment of diphtheria by the injection of antitoxic serum, and in less degree that of tetanus, not unnaturally encouraged the hope that a curative serum might be prepared which would prove equally efficacious in the case of typhoid fever. But, unfortunately, such favorable anticipations have not been realized. In the case of the two former diseases,

the serum of the horse, which has been successfully immunized against these infections, is found to be highly antitoxic, besides possessing some anti-bacterial power. In the case of typhoid fever, however, the serum of a horse, after repeated inoculations with the virus, though possessed of anti-bacterial properties, as in the case of diphtheria and tetanus, is found to be practically devoid of any antitoxic value, and consequently useless as a curative serum. Until a serum can be produced which is antitoxic, in addition to containing anti-bacterial substances, it would seem that all attempts to confer a specific passive immunity in enteric fever must, as in the case of cholera, apparently be doomed to failure. It should be mentioned, however, that Chantemesse claims to have produced a serum with which a remarkable success in the treatment of enteric fever is said to have been achieved. Speaking at the Seventh French Medical Congress, held last month in Paris, he stated that of 545 cases of the disease which had been treated in his wards at the 29th Bastion, between April 1st, 1901, and Oct. 1st, 1904, only 22 proved fatal, representing a mortality of 4 per cent. Planté and Foucauld, with the same remedy, were reported in January, 1903, to have treated at the Marine Hospital of St. Mandrier, 151 cases with 13 deaths, a mortality of 8.7 per cent. The two series together comprise 696 cases, with a fatality of 5 per cent., a success which is really phenomenal.

As to the nature of this serum there is at present some uncertainty. For its preparation a horse is immunized by repeated inoculation with toxic products of the typhoid bacillus obtained by special methods of cultivation. The serum eventually acquires curative properties, but the process is a slow one, requiring a good many months for its accomplishment. Chantemesse states that the serum retains its properties unimpaired by keeping, an observation which suggests that its mode of action is not a bactericidal one. On the other hand, the fact that its injection is often followed by definite, though not prolonged, constitutional disturbance, and the very remarkable fact, as stated by Chantemesse, that the more seriously ill the patient is, and the more advanced the disease, the smaller should be the injection, seems hardly compatible with the action of a serum which is merely antitoxic. It has been suggested by Dr. A. E. Wright that its curative properties may be explained on the assumption that an active immunity is conferred on the patient as a result of the transference from the horse of unneutralized bacterial poisons, which act as vaccines when introduced into the human organism. It is to be regretted that more precise information as to the

exact nature of Chantemesse's serum is not forthcoming, since its success in practice is apparently very striking. Any inference as to the efficacy of the serum, however, is unfortunately weakened by the fact that various other remedies, such as baths, packs, and cold effusions, were used in these cases, in addition to serum therapy, whenever their employment appeared to be indicated.

The beneficial influence which it is claimed may be exerted on the progress of the disease by previous inoculation with attenuated cultures of the typhoid bacillus, which material, it may be observed, is not a serum, though often wrongly so called, but a vaccine, assuredly possesses some claim on our confidence. By this method, undertaken primarily as a protective measure, an active immunity is conferred, at any rate for a time, and we are therefore prepared to believe that a certain amount of controlling influence might be exerted on the course of the disease, even though it may have failed to avert infection. The procedure, which was initiated by Dr. Wright when professor of pathology at the Army Medical College at Netley, consists of the inoculation of sterile cultures of the typoid bacillus which have been attenuated by exposure to heat. The process is analogous to the anti-cholera inoculations successfully practised in India by Haffkine and more recently on an extensive scale against plague. It is interesting to note that the work in each instance has for its prototype the world-renowned antirabic inoculations of Pasteur, who to some extent, however, must be regarded as having been working in the dark, since the specific infecting agent of rabies has not even yet been determined. The immediate effect of the inoculation, as Wright has been careful to point out, is to induce a temporary lowering of resistance. This "negative phase," as he terms it, corresponds with a diminution of the bactericidal power of the blood, and until it has passed off the subject is apparently not only more susceptible to enteric fever but the attack is likely to be more severe if contracted. Under the system of dosage which it has so far been customary to employ this period of heightened susceptibility has appeared to last for from one to two weeks, but with improved methods of administration, founded on exhaustive experimentation and confirmed by riper experience, Wright has shown that it may be very substantially reduced.

The success attendant on Wright's method of anti-typhoid inoculation has been a source of considerable difference of opinion amongst those who have had practical experience of its use. Although the inoculations have been carried out on an extensive scale, more especially amongst the British troops in India

and in South Africa during the recent war, the difficulties in the compilation of accurate records, the impossibility in many instances of getting data which are strictly comparable, and the unsatisfactory conditions under which the inoculations were so often performed, have tended to impair materially the authority of the published results. When, however, the numbers comprising any statistical record are large and the separate groups contained in it are comparatively numerous, such fallacies certainly tend to exert less influence, and the inference carried becomes proportionally stronger. This, of course, holds good in respect to the statistics of anti-typhoid inoculation.

If we refer to the records dealing with inoculation among the British regiments serving in India as published in the Army Medical Reports, we find that amongst 15,384 men inoculated during the years 1899 to 1901 in various parts of the Indian Empire, the incidence of enteric fever was 0.8 per cent. as against 1.5 in the uninoculated, and amongst the 2,260 attacks comprised in the series, the case mortality in the inoculated was 15.6 per cent., as against 26.6 per cent. in those who had not undergone the treatment. Again, the combined results in a variety of military hospitals in South Africa as furnished in a report by Dr. R. W. Dodgson, the special commissioner appointed to inquire into their working, show that in respect to 4,138 cases of enteric fever, the case mortality amongst the inoculated was 8.2 per cent., whereas it was 15.1 in those who were not inoculated. In this instance the reduction in mortality was almost 50 per cent., and in the case of the staffs of three of the hospitals —viz., Nos. 8, 9, and 10—general hospitals—located in Bloemfontein during the epidemic of 1900, the reduction obtained was nearly a three-fold one, but in this instance the number of attacks, viz., 109, was but small. An investigation as to the value of Wright's method of anti-typhoid inoculation was undertaken by the College of Physicians last year at the request of the War Office, and a special committee of the College was appointed to inquire into it. Careful examination of the whole of the evidence available has tended to show that not only is a considerable degree of protection conferred by the inoculation, but that it is also capable of exercising a mitigating influence upon the severity of attack. Further investigations are now being undertaken with the object of effecting an improvement in the vaccine and of extending our knowledge as to the best and most appropriate dosage, and encouraging as the results up to date undoubtedly are, it may be confidently expected that with additional light on these points still better results may be looked for in the future.

2. Next, as to the antipyretic method of treatment. On the assumption that pyrexia is the most important factor in a case of enteric fever, the exhibition of remedies which have the power of reducing the body heat has been very extensively employed. Although certainly less practised in this country than on the continent, the method has received the support of some of our most distinguished clinicians. An antipyretic effect may be brought about either by drugs or the direct application of cold to the surface by means of cold baths, packs, sponging, etc., or by a combination of both.

Of the various drugs which are recognized as possessing antipyretic power, such as sulphate of quinine, antipyrin, antifebrin, phenacetin, salicylates of sodium and quinine, resorcin, kairin, and thallin, even digitalis and veratria, the best for the purpose is undoubtedly quinine. Not only does quinine possess a marked antiseptic influence over living cultures of the typhoid bacillus, as was experimentally demonstrated by Eberth, but its administration is not attended with the depressant influence on the heart, in some instances leading to dangerous collapse, which antipyrin, in common with the other tar products I have named, is prone to exert. Nor is it, except when given in excessive doses, productive of the mental confusion, delirium, and vomiting which so often attend the use of the salicylates. Quinine, moreover, in addition to its value as a cardiac tonic, is believed not to exert any inhibitory influence on the elimination of toxins from the system, as is said to occur with the drugs of the antipyrin class. If quinine be given with the object of lowering the temperature, it must be administered in large doses—from fifteen to twenty grains or more, preferably, twice in the twenty-four hours; or, better still, according to the method recommended by Bouchard, which is to give four doses of seven and a half grains, repeated at intervals of a quarter of an hour in the evening of every third day during the first fortnight of the fever. In any case it is a favorable sign if the administration of the drug be followed by a marked fall of temperature. It should be remembered that the full physiological effect of quinine as an antipyretic is not reached until after the expiration of four or five hours, and occasionally even eight. The time of its administration, therefore, should be regulated accordingly. By giving large doses of quinine at the times when the temperature naturally tends to remit the pyrexia can sometimes be made to assume an intermittent course, resembling that so characteristic of normal defervescence. It is very problematical, however, whether an effect produced under such obviously artificial conditions possesses any advantages over

a pyrexia of less variable range, provided it be moderate in degree.

For my own part I do not favor the use of antipyretic drugs —at any rate, in antipyretic doses—in cases of moderate fever, as I firmly believe such pyrexia to be a natural element of defence against bacterial invasion, and that in proportion as one is successful in stifling what appears to be a reactive pyrexia by means of a powerful antipyretic drug, one is acting the part of a very questionable friend in tying the hands of one who is striving to defend himself against an antagonist who has already secured an advantage. In cases, however, in which the pyrexia becomes excessive and in itself represents an additional element of danger by reason of its damaging effect on the cardiac muscle and the central nervous system, vigorous antipyretic measures are certainly indicated, as in these circumstances the symptom pyrexia calls for prompt repression. For its accomplishment I much prefer the direct application of cold to the surface, supplemented, if necessary, by a dose of sulphate of quinine, but to this I shall have occasion to refer again when speaking of symptomatic treatment.

Of the various methods of treating enteric fever by means of cold application to the surface, or, to speak more correctly, by the abstraction of heat or refrigeration, there can, I think be no doubt that the most effective by far is the repeated employment of the cold bath, a form of treatment strenuously advocated some forty years ago by Brand, of Stettin. This, with slight modifications at the hands of his numerous followers, has been very widely employed on the continent, in America, and elsewhere; and, it must be admitted, with signal success. Treatment by means of frequent cold bathing had been extensively practised by James Currie, of Liverpool, some seventy or eighty years previously, though subsequently it fell into disuse. Currie's methods were undoubtedly somewhat crude and apparently more exacting, although the same principle was involved. He placed his patients in a wooden tub and buckets of cold water were poured over them, a procedure which is hardly in accordance with our views as to the proper way of dealing with a case of enteric fever at the present day. But even in Currie's time, as Collie has pointed out, a cold bath treatment was no new thing, since the records show authentic evidence of its employment by the ancients. Asclepiades, for instance, was in the habit of sending his fever patients to bathe in the springs of Catilliæ, where they apparently derived great benefit.

It is claimed that the cold-bath treatment, when properly

carried out, effects a mitigation of the general symptoms of the disease (some of which, though recognized as normal accompaniments of enteric fever, are averted altogether) and a reduction of the case mortality by a half or even two-thirds. This contention is supported by published results. Thus in the Prussian army the case mortality was reduced from 25 per cent. to 8 per cent. by means of the cold bath. Jurgensen effected a reduction from 15.4 per cent. to 3.1 per cent. Drasche, of Vienna, brought down his hospital mortality from 16.2 per cent. to 9.3 per cent.; Tripier and Bouveret, of Lyons, reduced their mortality from 25 per cent. to 7.5 per cent. Osler, of Baltimore, lowered the death-rate from 21.8 per cent. to 7.4 per cent. Thompson, of New York, reduced his mortality from 19 per cent. to 7 per cent.; Hare, of Brisbane, from 14.8 per cent. to 7.5 per cent. The general experience, then, would show that the fatality from enteric fever can be brought down to somewhere about 7 per cent. by a thorough application of the cold-bath treatment. Hare's record is particularly interesting. For a period of ten years all cases of enteric fever admitted into the General Hospital at Brisbane were treated with the cold bath. They numbered 1,902, and the results were compared with those obtained in a consecutive series of 1,828 cases received into the hospital during the four and a half years immediately preceding its adoption. The case mortality in the two series was, as I have stated, 14.8 and 7.5, respectively. The record is of particular value, since for a period of seventeen months before and three years after, the cold-bath treatment was introduced, both the management of the wards and the care of the patients were under the personal supervision of Dr. Hare himself.

It was particularly insisted upon by Brand that to procure the full benefit of the treatment, it must be commenced at an early stage of the disease. Brand maintained that if the treatment were commenced by the fourth day and continued throughout the attack according to his instructions, not only would the pyrexia be kept at a lower level, but the intestinal lesion would be held in check, the affected follicles in these circumstances not proceeding to ulceration, and consequently the occurrence of both hemorrhage and perforation would be averted. If, on the other hand, the baths were not commenced until a later stage of the illness, the occurrence of actual ulceration could not be avoided, although the course of the illness generally would be favorably influenced in proportion as the treatment was early adopted. Brand's instructions were that the bath should be given every three hours whenever the rectal temperature registered 102.2 degrees or over,

and that the temperature should be taken again half an hour after the bath, when a fall of about two degrees might usually be expected.

In this country the use of the cold bath has been mainly restricted to the combating of hyperpyrexia in special cases. As a systematic method of treating enteric fever it has received comparatively little support, although it has been recommended by such high authorities as Sir William Broadbent and Dr. W. Cayley. Professor Osler, who is a firm supporter of the cold-bath treatment, strikes the right note when he states that he regards it as " not so much special and antipyretic, as tonic and roborant," and were one to supplement this criticism by claiming for it in addition a powerful eliminative agent, one would probably not be overestimating its virtues. Although Brand claimed for the cold bath that its action was essentially protective against a high temperature the fact that he enjoined more or less continuous friction of the skin throughout the period of the patient's immersion suggests that he was probably alive to its action as an eliminant. It is by no means improbable that it is to its salutary influence on the nutrition of the skin and to its power of maintaining the excretory activity of both the skin and kidneys that the cold bath mainly owes its marked superiority over all other therapeutic procedures of which the primary aim is refrigeration.

(To be continued in February issue.)

Clinical Department.

A Case of Fracture of the Surgical Neck of the Humerus in an Octogenarian. PHILIP E. HILL, M.R.C.S. (ENG.), Surgeon to the Crickhowell Workhouse Infirmary, England, in *The Lancet.*

A man, aged eighty years, was admitted into the Crickhowell workhouse infirmary on October 20th, 1904, suffering from a fracture of the surgical neck of the right humerus. On examination the arm was found to be swollen considerably, with ecchymosis extending from the shoulder to the wrist, and the patient was in great pain. Some days prior to his admission he had been seen by a medical man, who had placed a pad in the axilla and strapped the arm to the side. Coaptation having been effected, a pyramidal pad with its base upwards was placed in the axilla and two splints were applied, an angular one to the inner side of the arm, and an outer one extending from the shoulder to the elbow. The arm and chest were then bandaged together and the hand and wrist were enveloped in a sling. The patient was placed on a water bed and necessarily kept there during the whole of the treatment. Unfortunately, at the end of six weeks he died from cardiac failure induced by the excessively low temperature which prevailed at the time. I made a post-mortem examination of the limb in order to ascertain what amount of repair, if any, had taken place. I found that the fractured ends were accurately adjusted and that firm, bony union had been accomplished, a result hardly anticipated in a man where the reparative processes are presumably deficient in consequence of the vital powers being exhausted by age and debility, as evidenced by the fact that from the first there was incontinence of urine and feces.

A Case of Surgical Emphysema in Pulmonary Tuberculosis. R. D. ATTWOOD, M.R.C.S. (ENG.), L.R.C.P. (LOND.), Assistant Medical Officer, Southwark Union Infirmary, England, in *The Lancet.*

A man, aged thirty-eight years, was admitted into the Southwark union infirmary in June, 1904, with extensive phthisis of the right lung. On Nov. 12th his face was noticed to be extremely swollen; on examination he was found to have surgical emphysema of the face and right side of the chest. The emphy-

sema spread to the left side of the chest and abdominal wall. The patient died on Nov. 18th. At the post-mortem examination it was found that the larynx and trachea were normal. There was no pneumothorax. The right lung contained many areas of consolidation and several small cavities. Near the right apex was a small cavity over which the lung was adherent to the chest wall, and which communicated with the parietes by a small opening in the third intercostal space.

A Case of Enteric Fever Due to Eating Oysters. Joseph Clough, M.R.C.S. (Eng.), L.R.C.P. (Lond.), England, in *The Lancet.*

The patient was a boy, aged four years, who, about the middle of August, went for a two hours' sail at Scarborough. He was very sea-sick and vomited violently. On landing he ate two oysters from a street stall without any vinegar on them. Seven days afterwards he fell ill, and fourteen days afterwards he had distinct enteric fever spots. For the first three weeks of his illness he progressed favorably, but at the end of the fourth week his abdomen became swollen and painful, and he suffered from vomiting, tendency to general coldness, and feeble circulation. During the first half of the fifth week he was sleepless and delirious, his temperature varied from 102.5 deg. to 103.5 deg. F., and there was diarrhea, some motions being passed in bed involuntarily. I ordered him chicken broth with plasmon in it, and castor oil in doses of about a teaspoonful, after which he immediately began to improve. His temperature did not become normal till the end of the seventh week of the illness. The boy is now as strong as ever.

Records of Swallowed Safety-Pins. Arthur DeVoe, M.D., of Seattle, Wash., in *American Medicine.*

Richard B., aged five years, swallowed an open safety-pin one and a half inches long at 8 o'clock a.m., September 4th, 1904. At 11 o'clock a.m., three hours later, by aid of the roentgen ray, the pin was observed in the esophagus just above the upper border of the sternum. The boy was soon chloroformed and the pin pushed down into the stomach. His parents refused to submit to a gastrotomy for its immediate recovery. September 7th, at 1 p.m., the pin not having passed the bowels nor produced any

symptom of distress, the patient was given stewed dried prunes to eat of freely. At 6 o'clock a.m., September 8th, the pin passed readily, along with a mass of partially digested prune skins notably visible.

This pin might have passed naturally into the stomach by the aid of some suitable effort at swallowing food or drink. Nothing of the kind was tried.

The safety-pin, a notable household and nursery convenience, made with bent wire, a spring temper, and a sharp point, is acquiring something of a record in medical literature for passing in open form through the alimentary canal in children. Once started, point backward, and it cannot start otherwise, this formidable looking affair seems to pass with unexpected readiness through the whole digestive tract, reappearing in a more or less corroded and damaged plight, the child meantime having presented few, if any, symptoms of distress from its presence. One, two, three, four, twenty, or even sixty days have been known to elapse between the ingress and the egress of the pin, the longer periods giving ample time, one would think, for the setting up of irritation by its presence in children aged nine months to four or five years.

Safety-pins are in such common and familiar use that it is well for all to know that they have been occasionally swallowed in open form, and, the habits and impulses of parents and children remaining as in the past, such accidents are bound to occur from time to time in the future.

Now, the mechanism of an open safety-pin is such that if placed in a vitalized muscular canal, like the alimentary tract, it must advance, if at all, "like a crab, backward," dragging the point and hood of the pin by a safe motion, which gives small chance to pierce the tissues. This is true especially of the esophagus and the small intestine, the canals of which are not wide enough to permit an end-to-end turning of a one-and-a-half or two-inch pin in its course. It is true that the larger spaces of the stomach and large intestine offer better opportunity for the tumbling process, but a careful study of the open safety-pin will show that it must soon right itself and advance in accordance with its name in true safety form, *i.e.*, backward, eye or loop leading, point and hood following, the advancing loop affording a resting place for prune skins or other undigested shreds, thus assisting the progress of the pin.

Within the past two years, 1902 and 1903, the *Medical World* of Philadelphia has placed upon record quite a number of cases of children of various ages who have swallowed open safety-

pins, and who have successfully and safely passed the same after varying intervals of time. Within the past month two cases have come to my personal knowledge in this city.

If I were to be given a choice for my child to swallow a safety-pin open at the usual angle or a common straight pin, I should consider the straight pin the more dangerous of the two.

Instantaneous Cure of Erysipelas. W. B. Taylor, M.D., Dexter, Ga., in *American Journal of Dermatology.*

In studying erysipelas I found in reading after Prof. Anders, of Philadelphia, in his text-book on practice, edition 1902, where he says a knowledge of the microbic nature has led to the local application of numerous antiseptic remedies, and it is along this line that the greatest advances in the treatment of the disease are to be expected. This led me to believe that we had some drug at our command that would dissolve out the sebaceous matter of the skin and penetrate the deep layers and superficial lymph vessels, the habitat of the streptococcus, and kill them.

In studying further into the subject, I concluded that creolin, being a saponified coal tar creosote, was worthy of a trial.

My first opportunity to use this remedy was some months after my study of the subject from an antiseptic standpoint, in May, 1903. My first case was a married lady, about thirty-three years of age, who gave a history of several previous attacks. Examination showed small wounds on both feet, evidently the point of infection. The disease had spread far above both knees, with intense, burning pain. I at once painted undiluted creolin over the affected area and waited three minutes and washed off same with plain water. The effect was instantaneous. The lady was cured, the skin resuming its natural appearance, with no damage done by the creolin.

I had the opportunity to use it in four other cases—two small children, one young adult female and one aged gentleman (sixty-five years old), with same results as in first case.

If this treatment shall prove a success in the hands of the medical profession, thereby saving many lives from complications which are liable to follow erysipelas, I shall feel gratefully rewarded.

Hoping to hear results from any physician who has an opportunity and wishes to test the efficacy of creolin in the treatment of erysipelas.

A Case of Hemorrhagic Typhoid. J. R. Durham, M.D., F.T.M.C., Warren, Pa., in *J.A.M.A.*

History.—J. O., aged twenty-eight, single, occupation woodsman, was admitted to the hospital on the evening of Sept. 3rd, 1903, with a history of having been ill one week, and of coming from a camp where typhoid fever was present. Temperature, 104.6; pulse, 94; respiration, 34; urinary analysis negative.

Course of the Disease.—The next morning the temperature was 105; pulse, 100; respiration, 42; considerable bronchial cough, severe headache and delirium. The pulse becoming weaker, he was placed on strychnia, gr. 1-60 every four hours, while the nervous symptoms and pyrexia were treated by the ice-bag to the head and ice-water sponges every two hours.

September 5.—Temperature ranged from 102 to 105; pulse from 90 to 100; respiration varied between 40 at 8 a.m., 22 at 2 p.m., and back to 40 at 6 p.m.; abdominal symptoms were now more pronounced, there being considerable tympanitis and diarrhea; for these turpentine stupes and turpentine inunctions were used, with salol and betanaphtholate internally and later turpentine emulsion; large quantities of gas were expelled. The next night showed no change in his condition, except that there was circulatory depression during the sponges, for which he was given a half ounce of whisky before the treatment.

September 6.—The temperature remained through the day at 105, pulse from 95 to 104 and weaker, respirations 28 to 36. Ice-water enemas were given every three hours, while strychnia was given hypodermically every four hours in dose of 1-40 gr.; the rectal tube was also used with good results.

Between this date and September 10, the patient continued to be desperately ill; the heart showed some intermittence, so nitroglycerin, gr. 1-200, was added to his strychnia; the other symptoms were the same.

September 11.—Temperature from 102.2 to 104, pulse from 88 to 94, better quality; respirations from 22 to 32; cold packs were used at this point, being better borne by the patient. There was considerable cough and some congestion of the bases of the lungs.

September 13.—Temperature falling very slightly, the pulse lower and of fair quality; respirations still from 28 to 36.

September 14.—Temperature from 101.8 to 103.6, pulse from 92 to 94, respirations from 28 to 44. This was the eighteenth day of the disease. Hemorrhages from the gums and mucous membrane of the mouth now made their appearance,

and also under the skin wherever the hypodermic needle was used.

September 15.—There was a continuous hemorrhage from the rectum, the urine also being quite red; a slight oozing of the blood was next noticed from the skin of the nose; ergotol in 10 minim doses was given hypodermically every four hours, and 15-grain doses of calcium chlorid by the mouth every five hours. Besides this, a mouth wash of adrenalin chlorid, 1 to 4,000, was used and with good effect.

September 17.—The temperature ranged from 100 to 101.6, respirations from 22 to 30, pulse from 98 to 106; after an enema at 2 p.m., he expelled a great deal of gas and dark blood, while the urine was almost black. Protein, gr. 15 every three hours, was added to the treatment at this point.

September 18.—Temperature, 100 to 103.6; respirations from 22 to 28. The bleeding from the mouth was much better, but a severe hemorrhage from the bowels occurred at 5 a.m., there being three pints of fresh blood expelled; bladder hemorrhage same. Morphin, gr. ¼, was given at once, as well as ergot, ℥x., and the administration subcutaneously of 700 c.c. of normal salt solution. After the use of the morphia the respiration dropped as low as from 14 to 18 a minute and no fresh hemorrhages appeared.

September 20.—Urine began to clear up; pulse became as low as 78; temperature, 99.8; respirations from 15 to 18. About this time two superficial abscesses appeared on the nates, but with antiseptic dressings they soon healed.

Between September 21 and October 4, the patient made steady progress, his bedside record being discontinued on the latter date. He was discharged from the institution October 21, after having been under treatment for fifty-five days. His convalescence was marked by a bradycardia, the pulse running as low as 48 beats per minute. The diet throughout consisted of broths, peptonized preparations and malted milk.

Remarks.—The symptoms which required the closest scrutiny were the diarrhea and tympanitis, the heart's action and the hemorrhages, the character of the latter making it an unusual clinical feature.

This patient lost in all about six pints of blood, which illustrates the point to which attention has been called by other clinicians, that a surprising amount of blood may be lost and yet recovery follow.

Acute Appendicitis Occurring on the Eight Day of a Typhoid Fever; Operation; Recovery. GEO. HERBERT WILLIAMS, M.D., M.R.C.S. (ENG.), L.R.C.P. (EDIN.), of Fishkill-on-Hudson, N.Y., Visiting Surgeon to Highland Hospital, Matteawan, N.Y., in *Medical Record.*

On June 8th, 1904, I was called to see Miss D. F., a well-nourished girl. She gave a history of having been sick for four days previously. The patient complained of severe headache and neckache, the pulse was 110, and the temperature 102 deg. The bowels were constipated, the tongue was coated, and one or two suspicious spots were to be seen on the right side of the abdomen. The patient was given twenty one-tenth grain doses of calomel at fifteen minute intervals, followed in two hours by an aperient. Then two grains of bisulphate of quinine every two hours. A strict milk diet was enjoined. At my morning visit the following day, the temperature had fallen to 100 deg., several movements of the bowels had been obtained; the pulse was 92. Headache and bachache were unrelieved. Quinine was continued. On June 10th the temperature was 101 deg., the other symptoms were the same.

On June 11th, the temperature was 100 deg., and a few additional spots were found on the abdomen. The patient still complained of severe headache and backache. On June 13th, the temperature was 103 deg. On examining the abdomen, the spots were still evident, and two or three more were present on the lower part of the chest. For the first time the patient complained of pain in the right side of abdomen, and pressure over McBurney's point elicited a good deal of distress. I advised that the patient be removed to Highland Hospital for more careful observation. On her arrival, the temperature had risen to 103.4 deg. Medicine and diet were continued as before, and an ice-bag was applied over the appendiceal region. During the next three days the temperature varied between 102 and 103.4 deg., there was increased pain on pressure over McBurney's point, a slight increase in number of spots. The patient had an anxious and distressed look, but retained her flesh well. The pulse was rapid, but of fairly good volume. On the twelfth day of the fever, at my evening visit, I found the temperature 103.4 deg., more pain on pressure, and some decided rigidity of the right rectus muscle. I advised operating. With the assistance of my colleagues, Drs. Doughty and McClintock, the operation was done on the thirteenth day of the fever. After the peritoneum was incised and the cecum drawn up and out of

the wound, the appendix presented itself, standing up in the wound like an inflated rubber finger cot. It was quite congested and enlarged in calibre, and about four and a half inches long. The omentum was sutured and the appendix amputated, the wound being closed in the usual manner. The appendix was carefully examined, and cut up on a director; the mucous coat was soft and broken down, and the outer two inches contained a considerable amount of pus. The operation was done on the afternoon of June 16th, and the temperature during the night fell to 100 deg., and at my morning visit on June 17th, at 9 o'clock, it was 98.2 deg. During that day it rose again, and at 5 o'clock on the morning of June 18th it was again 103 deg. Going up during the day, it reached 104 deg. at 5 p.m. From this time on, there was a more or less regular typhoid run of fever, with its usual symptoms. Quinine was given every four hours, and strychnine sulphate (1-50 gr.) every four hours. Surgically, nothing of interest occurred, the superficial stitches were removed on the seventh day, and a good, strong, healthy wound was found. On the twenty-fifth day the temperature went twice to the normal point, and after that, during convalescence, did not vary much.

I have thought the case worthy of record, as I have never before seen or known of the two diseases occurring together, and I think the coincidence must be very rare.

Why the temperature went to subnormal even for a few hours, the day after the operation, I am at a loss to understand, unless it was that the appendix was so large an additional focus of infection, and its removal so relieved the system that the fall occurred for a short time.

The patient left the hospital on July 20th, entirely recovered.

Therapeutics.

Enuresis: Julius Ullman, M.D., Buffalo, speaks of the treatment of enuresis (*N. Y. M. J. and P. M. J.*) as hygienic, physical, and suggestive, physical or mechanical. For the first, out-door life, nutritious food, avoidance of condiments, tea, coffee and alcohol; no liquids before retiring; empty bladder; child should be awakened once during the night to empty bladder. Under the second heading: error to employ corporal punishment; it is imperative to gain the confidence of the patient. Under third heading: massage; the rectum is emptied and massage is applied to sphincter vesicæ by index finger, the child lying in lithotomy position. This should be done one-half to one minute; deep, circular massage, two or three minutes, should be done over the hypogastric region. Resistant abduction and adduction, with child on back, with flexed knees, done from the knees; about two minutes. Standing against wall, patient may be instructed to cross and recross legs slowly for five minutes. The patient may be taken over the knees of the operator and his lumbar and sacral regions are sharply tapped frequently by the operator. Electricity, also, is useful. No drug is a specific. Trosseau was the first to advocate belladonna. Ergot has been beneficial in some cases. Holt uses a solution of atropine, one grain to two ounces of water; five drops at four, seven, and ten p.m.

Acute General Suppurative Peritonitis: The treatment of acute general suppurative peritonitis, according to Levings (*The Clinical Review*), as the result of appendiceal perforation, has, until the last year, been most unsatisfactory. It might be said, without fear of exaggeration, that until the past two years nearly all of these cases terminated fatally, but during the last year, or year and a half, a number of surgeons have reported a series of cases the majority of which have recovered under what might be called a new method of treatment. During the past ten months, ending with December, Levings has had ten of these cases, with nine recoveries. Free and unrestricted drainage of the entire abdomen is the important part of the treatment, which is accomplished by placing large

drainage tubes at the bottom of the pelvis, and putting the patient in a sitting posture as soon as put to bed. Every succeeding three or four hours, for two or three days, an antiseptic fluid is used for flushing, the patient being in the recumbent position during flushing.

Nickel Bromide in Epilepsy:

Some fourteen years ago, at the City Asylum for the Insane, at Ward's Island, New York, nickel bromide was tried for epilepsy, but with negative results. Reports from French sources leads us to judge that it is coming into favor again in that country.

Diet in Diabetes Mellitus:

Thomas B. Futcher, in *Maryland Medical Journal* for October, 1904, gives the diet used at Johns Hopkins in diabetes mellitus, which is a modification of Noörden:

Breakfast, 7.30 a.m.—200 c.c (6 ounces) of tea or coffee, without sugar or cream; 150 grams (5 ounces) of beefsteak, mutton chops, or boiled ham; one or two eggs, with plenty of butter, pepper, and salt; 30 grams (1 ounce) of butter, with steak and eggs.

Lunch, 12.30 p.m.—200 grams (6 ounces) cold roast beef; 60 grams (2 ounces) celery, fresh cucumbers, or tomatoes, with vinegar, olive oil, pepper and salt to taste; 20 c.c. (5 drams) whiskey, with 400 c.c (13 ounces) of water; 60 c.c. (2 ounces) coffee, without milk or sugar.

Dinner, 6 p.m.—200 c.c. (6 ounces) clear bouillon; 250 grams (8 ounces) roast beef; 20 grams (5 drams) butter; 80 grams (2 ounces) green salad, with 10 grams (2½ drams) vinegar, and 20 grams (5 drams) olive oil, or 3 tablespoonfuls of some well-cooked green vegetable; 3 sardines *a l'huile*; 20 c.c. (5 drams) whiskey, with 400 c.c. (13 ounces) water.

Supper, 9 p.m.—2 eggs (raw or cooked); 400 c.c. (13 ounces) water.

Silver Salts in Purulent Ophthalmia:

In the report of the Medical and Chirurgical Faculty of Maryland, in the *Maryland Medical Journal* for October, 1904, Dr. H. O. Reik, in a paper entitled "Recent Advances in Ophthalmology and Otology," refers to the report of Dr. Miles Standish, of Boston, a very excellent report made recently, and which was

based on experience in the isolation wards of the Massachusetts Eye and Ear Infirmary. He had made careful observation on a large number of cases of ophthalmia neonatorism and of gonorrheal conjunctivitis in the adult. It was demonstrated that protargol was to be preferred to silver nitrate in the treatment of these affections. Its application produces no pain. Solutions of 20 to 25 per cent. may be employed by the physician, while weaker solutions—2 to 5 per cent.—may be entrusted to the patient for frequent use. Dr. Standish strongly opposes the application of cold to eyes in these conditions, as it has a tendency to weaken the resisting power of the cornea and to favor ulceration in that tissue, the serious complication of these diseases to be dreaded. Great care should be used in cleansing such eyes; swabbing with cotton-tipped probes often abraids the epithelial coat.

Acetozone for Suppuration in the Lower Air Passages:

John Johnson Kyle, Indianapolis, during the past year has had a great deal of experience with a solution of acetone in inorganic oil used in a nebulizer or atomizer for the treatment of various pathological conditions of the trachea and lower air passages. In *The Therapeutic Gazette,* November, 1904, he says there is a certain technical point to be observed in the administration of the acetone inhalant: The acetozone inhalant must be administered only for a few moments at a time, or until symptoms of irritation are manifest, a minute or two being sufficient, allowing the patient to rest for two or three hours before another administration. The formula for the solution he uses is as follows:

℞. Acetezone Crystals..... 0.5 gramme.
Chloretone Crystals..... 0.5 gramme.
Refined bland mineral oil .....99.0 grammes.

Eczema:

Lassar says (*Dermatologische Zeitschrift,* Berlin, 1904): The first indication is, in the case of any existing eczema, to enquire carefully into its original character. We need often to search for a long time ere we discover the actual cause of the constant recurrence of the cutaneous inflammation. The main indication for special treatment is to preserve the irritated parts from special harm. Moist treatment, when indicated, consists of a bath with bran and a bland, never a medicated, soap, or fomentation with

chamomile flowers. Affected parts are then to be wrapped three times a day for a half hour in compresses moistened with 1 in 1,000 watery solution of sulphate of zinc. Directly on the moist follows the dry treatment, the free application of a simple dusting powder, such as a fine, pure talc. If itching, use 1 to 2 per cent. solution of carbolic acid. If burning, add to above ½ to 1 per cent. of menthol. This procedure will, in time, render the skin dry, when its smoothness can be restored by using a paste of oxide of zinc, 60, and olive oil, 40 parts, thickly smeared on, dusted over with talc. on the trunk and a light bandage on the limbs. In the morning the face is best cleansed with olive oil. The crusted eczema of the face in children can be rapidly cured if managed as follows: It must be carefully cleansed, oiled over, then washed gently. Then thickly smear with a salve of olei rusci, sulphuris sublimate, aa grammes 15; vaselini, saponis domestici, aa grammes 30; cretæ albal, grammes 10; M., powder and bandage. Finally the X-rays, cautiously used, are of great value.

An Acid Tonic:

℞. Tinct. ferri chloridi ..... f ℥viii.
Acidi sulphuric dil. ..... f ℥iv.
Glycerole pepsin ..... f ℥viii.
Aquæ ..... f ℥ij.
Olei Menthae pip ..... ♏v.

M. Sig.: 15 to 25 minims well diluted or dropped in capsules after each meal.—*Dana.*

Epilepsy: The average daily dose of bromides, for a person above fourteen years, is 60 grains. The best adjuvant by all odds is glycero-phosphate of soda, 30 grains daily. The standard prescription is:

℞. Aq. sol. glycero-sodii phosphati (50 per cent.) ... f ℥ii.
Sodii Bromidi ..... ℥iii.
Aquæ, q.s. ad ..... f ℥vi.

M. Sig.; One drachm twice a day in water, a.m. and p.m., six days in seven.—*Dana.*

Ulcers and Burns: Martin J. Schuh, M.D., New York, in the *International Journal of Surgery,* tells of the effective treatment of ulcers and burns by zinc dioxide. Its efficacy is most marked in ulcer resulting from varicose veins, the average time required to cure these being three weeks. A

10 per cent. ointment was used and the dressing changed three times daily. It is rapidly effective also in syphilitic ulceration of the leg. In the treatment of burns, brilliant results are said to be obtained by a 10 per cent. ointment.

D.T.'s: Jones, in *The Lancet,* Aug. 6, 1904, says: The great motor restlessness so often seen in alcoholic cases, and caused by painful visual and aural hallucinations, is best controlled by hyoscine in doses of from 1-120 to 1-60 of a grain administered hypodermically. Sulphonal or trional (20 grains twice a day) are useful.

Whooping Cough: Dr. Alvis Marti has been recently attempting to cure whooping cough by an entirely new treatment. Children with this disease sit for three-quarters of an hour in the midst of camphor and naphthalin vapor. He claims mild cases are entirely cured in from three to four weeks, the more severe cases from four to six weeks.

Acute Tonsilitis: The employment of formaldehyd in acute tonsilitis has produced good results in the hands of A. C. Jordan (*Bull. Gen. de Therap.*). He employs a 1 to 4 per cent. in glycerin in making his applications. This causes some pain for several hours, but is not unbearable. Eating and drinking should be prohibited for some hours after each application.

Opotherapy in Typhoid: Chantemesse (*Press Medicale*) reports 523 cases of typhoid fever treated with anti-typhoid serum, with 22 deaths, a mortality of 4 per cent. The usual mortality is 18 to 20 per cent. Anti-typhoid serum differs in this respect from diphtheria antitoxin, as the more aggravated the symptoms of typhoid, the feebler should be the dose.

Serum-therapy: Bergey, in *American Medicine,* classifies the sera: The antitoxic—two in general use—the diphtheria and tetanus antitoxines (the last is inefficient); the bactericidal immune sera—typhoid, dysentery, tuberculosis—in first two results have been disappointing; the immune sera which are not bactericidal—pneumococcus, the staphylococcus, and the streptococcus. Their therapeutic success is still in experimental stage.

Society Reports--Notes of Interest.

Paget's Disease of the Gum: Before the Pathological Society of London, Mr. A. Hopewell-Smith reported a case of Paget's disease of the gum, probably the first occasion where this disease has been noticed as affecting the oral tissues.

Stenosis of the Lower Portion of the Esophagus: According to Dr. Sippy, before the Chicago Medical Society, there have been only seventy-five to eighty cases of stenosis of the lower portion of the esophagus reported.

Internal Secretions, Present Status: Dr. Wm. H. Thomson, before the New York Academy of Medicine, states there is no doubt that the pancreas has much to do with diabetes. When the entire gland is destroyed, the disease develops in its severest form. If one-quarter of the gland is left the disease will not develop.

Congenital Atresia Hymenalis: Dr. J. Riddle Goffe recently reported to the New York Obstetrical Society two cases of this condition, one in a colored girl, nineteen years of age, and the other in a white girl of twenty-one years. Neither patient had any vicarious menstruation.

The Schott Method: Before the Philadelphia County Medical Society, in November last, Dr. Jas. M. Anders, after pointing out that confusion reigned in the minds of many physicians as to what were the suitable cases for the Schott method of treating chronic cardiovascular affections, stated that the method was especially valuable in arteriosclerosis with embarrassed heart action, most gratifying in cases of angina pectoris, and in the large group of cases arising from neurasthenic disturbances. He set down the contraindications as follows: 1. Fever. 2. Advanced arteriosclerosis. 3. Far-advanced

myocarditis. 4. The closing stage of chronic valvulitis, with extreme dilatation of the chambers. 5. Aneurysms of the aorta or its larger trunks, except in the incipient stage. 6. Any case in which the blood pressure was lowered by the balneological treatment. 7. Cases in which tenometric figure as low as 65 or 60 mm. of mercury was found. 8. Cases in which chronic bronchitis and asthma were well marked.

The Use of the Modified Champetier de Ribes' Balloon: In October last, Dr. James D. Voorhees gave his experience with this contrivance to the New York Obstetrical Society. He says, for the purpose of starting labor, making stronger pains, and producing dilatation of the cervix, this rubber bag is more valuable than anything else. His present deductions are taken from a series of 200 deliveries in private practice and 4,272 at the Sloane Maternity.

Pleurisies: In the section on medicine at the last meeting of the British Medical Association, Dr. William Osler said that, clinically, three great groups of pleurisies may be recognized: (*a*) Pyogenic; (*b*) the metapneumonic, and (*c*) the tuberculous. In the absence of pneumonia or sepsis, the existence of an exudate is suspicious of tuberculosis; and for the past twenty-five years evidence has been accumulating that all cases of simple sero-fibrinous pleurisy are tuberculous.

The Dangers of the X-Ray: Dr. Milton Franklin stated before the New York County Medical Association that a recent canvass of the practitioners employing the X-rays has failed to reveal a single serious result during recent times from the employment of the X-ray. Dr. Wm. B. Coley said at the same meeting that a great danger in treating malignant growths was necrobiosis of the tumor and its transference to other parts of the body.

Duodenal Ulcer: Mr. Mayo Robson stated before the Medical Society of London that he has operated on thirty cases of duodenal ulcer, about four of which were for perforation. He considers the leading symptoms are pain coming

on one hour before a meal, relieved by taking of food, and pain in the small hours of the morning. Then there was often distinct tenderness in the region of the gall-bladder and rigidity of the right rectus muscle. There could be no doubt about the remarkable benefit by the operation of gastro-jejunostomy. At the same meeting, W. McAdam Eccles stated, by way of differentiation between gastric and duodenal ulcer, that in the former a solid meal at once induced pain, but a draught of hot fluid would relieve pain. In duodenal ulcer, on the other hand, both a solid meal and a draught of fluid would cause pain some hours after ingestion. Associate with this melena, and a diagnosis of duodenal ulcer is justifiable.

The Prevention of Appendicitis: Dr. Wm. M. Harsha, Chicago, before the meeting of the Mississippi Valley Medical Association, said that the consensus of opinion was that more than 50 per cent. of the cases of appendicitis not operated on, recurred. Foreign bodies in the appendix, including fecal concretions, probably caused 10 per cent. of cases.

Call Stone Disease: In 1,000 operations for gall-stone disease, Charles H. Mayo reported for W. J. Mayo and himself before the Southern Surgical and Gynecological Association, in December last, that there had been 50 deaths—5 per cent. mortality—960 were cases of benign disease; 40 were malignant cases. The mortality in the latter was 22.5 per cent.; the mortality in the former 4.2 per cent.

Cirrhosis of the Liver: Dr. James K. Crook gave the following statistics of deaths from cirrhosis of the liver, compiled from the records of the New York Board of Health, at a November meeting of the Medical Association of the Greater City of New York: Under 1 year, 9; under 5 years, 11; from 5 to 10 years, 11; from 10 to 15 years, 9; from 15 to 25 years, 553; from 25 to 35 years, 1,061; from 35 to 45 years, 1,196; from 45 to 55 years, 959; from 55 to 65 years, 565; from 65 to 75 years, 140; from 75 to 85 years, 14.

Physician's Library.

The receipt of the *First Report of the Wellcome Research Laboratories* at the Gordon Memorial College, Khartoum, is hereby acknowledged. The report is a handsome volume, beautifully illustrated, and was compiled by the Director, Andrew Balfour, M.D., B.Sc., M.R.C.P. (Edin.), D.P.H. (Camb.)

The J. J. Taylor Physicians' Pocket Account Book. We have pleasure in acknowledging the receipt of a copy of this neat, handy account book. It is arranged by Dr. J. J. Taylor and published by the Medical Council, 4105 Walnut Street, Philadelphia. There are a number of valuable business suggestions incorporated therein.

How to Study Literature, a copy of which has been kindly sent us for notice in these pages by Hinds, Noble & Eldredge, Publishers, 31, 33, 35 West 15th Street, New York, is a neat little work, and will be found of much practical value. The author is Benjamin A. Heydrick, A.B. (Harv.), Professor of English Literature, State Normal School, Wildersville, Pa. This is the third edition, revised and enlarged, a fact which speaks for itself. The price is 75 cents, postpaid.

Diet in Health and Disease. By JULIUS FRIEDENWALD, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and JOHN RUHRAH, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Octavo volume of 689 pages. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Canadian agents: J. A. Carveth & Co., Lmited, 434 Yonge Street, Toronto. Cloth, $4.00 net.

This latest work on diet is practical and comprehensive, prepared to meet the needs of the general practitioner, medical student, hospital interne, and trained nurse. It contains a full account of food stuffs, their uses and chemical compositions.

Dietetic management in all diseases in which diet plays a part in treatment is carefully considered, the articles on diet in diseases of the digestive organs containing numerous diet lists and explicit instructions for administering. The feeding of infants and children, of patients before and after anesthesia and surgical operations, and the latest methods for feeding after gastro-intestinal operations have never before been discussed with such practical detail. The subject of rectal enemata is given completely, with recipes and full instructions as to technic. Diet is considered in its relations to age, occupation, and environment; and the beneficial results from the rest cure have been accorded prominent consideration. There is also a section on food adulteration and the resultant diseases. Withal, this is a work well worthy the reputation of its authors, and we most cheerfully recommend it.

Blood-Pressure; as Affecting Heart, Brain, Kidneys and General Circulation. A Practical Consideration of Theory and Treatment. By Louis Fangeres Bishop, A.M., M.D., Physician to the Lincoln Hospital, New York, etc. New York: E. B. Treat & Co.

This small book records the observations of its author who for fifteen years past has been paying special attention to the question of the vital relations of the physics of the circulation, a subject of much interest and importance, treated of in an interesting manner.

The Surgery of the Diseases of the Appendix Vermiformis and Their Complications. By William Henry Baule, F.R.C.S., Surgeon to St. Thomas' Hospital; formerly surgeon to the Royal Free Hospital; Hunterian Professor of Surgery at the Royal College of Surgeons of England, etc.; and Edred M. Corner, M.B.B.C., F.R.C.S., Surgeon in Charge of Out-patients to St. Thomas' Hospital, and Assistant Surgeon to the Great Ormond Street Hospital for Sick Children; Erasmus Wilson Lecturer at the Royal College of Surgeons, etc. Chicago: W. T. Keener & Co. Price, $2.50.

It seems to be becoming the fashion to issue books on one subject alone, and it is not a bad one in some instances, such as the present, where the literature on the subject is so wide, varied,

and extensive. In addition, in this book will be found sections on acute abdominal disease, carcinoma, tubercle, and other diseases of the appendix, life insurance, etc., which, as they have not taken any part in other books on appendicitis, thereby adds much to its value.

Ophthalmology is a new medical journal devoted to this special subject, which we have been asked to place on our exchange list. It is issued from Milwaukee, under the management of Dr. H. V. Wurdmann, of that city. It gives splendid promise of being a useful and important journal.

American Journal of Nursing. We have recently been privileged to add to our exchange list the *American Journal of Nursing*, a monthly magazine devoted to the interests of the trained nurse and the official organ of many well-known nurses' societies in the United States. The December issue is a very handsome production, nicely illustrated, containing good matter, and would not be out of place in the physician's reading-room. We notice that the Canadian collaborator is Miss Snively, of the Toronto General Hospital Training School for Nurses, which will be sure to commend the journal to the Canadian nurse fraternity.

Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

The medical profession of Halifax and Nova Scotia are already getting matters into ship-shape for a monster meeting of the Canadian Medical Association there from the 22nd to the 25th of August next. Mr. Francis Caird, of the Royal Infirmary of Edinburgh, has promised to come and deliver the address in surgery. Dr. Howard A. Kelly, of Johns Hopkins, Baltimore, will deliver the address in gynecology. Dr. J. W. Stirling, of Montreal, will deliver an address in ophthalmology. In addition to these there are to be addresses in medicine and pathology, which is certainly an attractive nucleus of what promises to be a very fine programme and a very successful meeting. The success following in the footsteps of the Canadian Medical Association will be sure to make the Maritime men enthusiastic in its cause for 1905. Between three and four hundred medical men are a lot to get together in a country where distance is a great contributing factor in deterring men from being present at these annual meetings; and our

friends in the East, now that they have taken upon themselves the work of organization for 1905, will most surely deserve the loyal support of those of the West. We are satisfied from the hint we have had of entertainment, that the 1905 meeting will be one of great enjoyment and be as truly profitable as it will be pleasurable. Let our readers make up their minds early that they will go to Halifax in earnest next August.

Anent our criticism of the "commission business" in Canadian medicine, or rather, to be quite correct, the lack of such in Canadian medicine, we notice from our contemporary, *The Canadian Journal of Medicine and Surgery*, as well as from the responsible columns of a leading society paper, that there is or has been a "commission business" of a rather inferior character carried on in connection with one of the proprietary schools of the city. This order of commission seems to be a mighty poor specimen, and Dr. MacCallum, when he turned it down, did only an act which an honorable man would do. We are loth to believe that any man is amongst us who would give back 10 per cent. of his fees to a girls' college in order to hold the business of such institution. It is scarcely necessary to say anything of such an institution, or the authorities thereof, who would ask for this. It would certainly not be a charitable institution.

The year 1904 has been chased into history. It cannot be said that it has been remarkable for any important, specific, medical achievement in the annals of medicine, although, no doubt, there has been much painstaking, active medical work. True, the British Commission for the investigation of cancer was organized, but it has accomplished nothing; but the time is short. Researches have been made into the mysteries of immunity; good work has been done in the matter of the care of the consumptive patient; Sajous has studied the internal secretions to some advantage; yeast has been rehabilitated in the therapeutic

world to some extent. In surgery we are yet watching experimental renal decapsulation. In Toronto, Ontario, and Canada, the most noticeable item is the impetus given to the idea of a large hospital in connection with Toronto University Medical Faculty.

Last year the doctor loomed large in politics. The reason is not far to seek; there have been so many general elections. Of course he has a right to be there the same as any other citizen, but politics have ruined many a man's practice; and it is easier to get into politics than it is to get into practice. Politics is never a very clean game, and most doctors who have been in it or who are in it would be better had they never had anything to do with it. A man must, however, take upon himself the duties of citizenship, and if his natural bent lies in this direction, if he has a taste for public life, and assumes the trust without the "graft" idea buzzing in his bonnet, he should be upheld and supported by both those within and without the profession who desire to see clean men in public life to-day. But too often, probably, the profession looks askance at the doctor-politician, in many cases without just cause. His motives are impugned, probably justly, probably unjustly. No doubt all classes of the community should be represented in the legislature, and the doctor ought to be a very important member of that body. Their number is not at any times large when they get into parliament, and wherever one appears in the political race, we think he ought to have the earnest support of the profession to which he belongs.

Some one has recently been recommending that all bread be delivered in a paper bag. The idea is a good one, but we are afraid that public sentiment is scarcely educated up to that mark yet. Another good, if not better, thing would be the prohibition of fruits and berries in open shop windows in summertime, catching all the dust and dirt blowing off the street on a windy day. Still another matter ought to receive attention at the hands of the health authorities: the prohibition of chunks of ice on the side-

walk, etc. This mark for dogs lies often for hours where the man with the tongs has slung it. When you buy vegetables from your huckster he will carry same into your cellar; but the autocratic ice man comes along and "slings it," perhaps on the sidewalk, perhaps "bang" against your back-door, perhaps over your high-board fence. It is bad enough to get ice which you trust is pure, but you don't want it deposited where animals can monkey with it.

In medical circles in Toronto the last week of 1904 may be called "Osler" week. On the afternoon of Tuesday, the 27th of December, Dean and Mrs. Reeve were "at home" in the Medical Buildings, and many of the profession of Toronto and their wives, called to meet Dr. Osler. On the evening of the 28th, Professor McPhedran was "at home" in his handsome residence on Bloor Street, where over two hundred physicians gathered to wish a Happy New Year to Professor McPhedran and his distinguished guest. On the following afternoon Professor Osler formally opened the new home of the Ontario Medical Library Association in Queen's Park, and, of course, made some practical remarks. Then he was dined by the Canadian Club and the Trinity Old Boys' Association. Such homage would be sufficient to turn the head of an ordinary man, but Osler's head never revolves; it always goes straight forwards and continues to mount upward. All wish him God-speed in his new home.

According to the *Medical News,* there is a good chance of further lustre being shed on Canadian medicine. Dr. Lewellys Francis Barker is likely to become Professor Osler's successor at Johns Hopkins. It states that the *Baltimore Sun* writes that the trustees of Johns Hopkins strongly favor the appointment of Dr. Barker, who is Professor of Anatomy in the Rush Medical College of the University of Chicago. Dr. Barker is yet a young man, being only thirty-seven years of age, but in the space of his short life he has had an exceedingly brilliant career.

News Items.

CANADIAN.

Dr. Glen Campbell, Vancouver, is visiting in Montreal.

Dr. Hopkins, formerly of Grand Valley, has located at Toronto Junction.

Dr. Breffney O'Reilly has returned to Toronto after a trip across the Pacific Ocean.

Dr. D. A. Shirres, Montreal, went to the Pan-American Medical Congress at Panama.

Dr. J. Colville has left Bowmanville for Chatham, having bought out a medical practice there.

Dr. Henry Pigeon, Peterboro', died suddenly on the 7th of December at the age of sixty-five years.

Sir George A. Drummond has been elected President of the Montreal League for the Prevention of Tuberculosis.

Dr. Murray McFarlane has moved to 18 Carlton Street, the residence formerly occupied by Dr. Uzziel Ogden.

Dr. S. R. Richardson, of Eglinton, has received the provincial appointment of associate coroner for the County of York.

Dr. Reive, who has been assisting in the General Hospital, Toronto, for some time, has gone to Huntsville, where he will spend the winter as assistant in the hospital there.

Dr. Mackenzie is visiting in Trenton, having left Rossland a few days ago. He will devote the rest of the winter to hospital work in Montreal, having left his practice in Rossland in charge of his nephew, who has just graduated from McGill University, Montreal.

Dr. C. J. Fagan, Provincial Health Officer of British Columbia, has been conferring with the Health Board of Vancouver regarding the health of that city.

Dr. P. H. Bryce, senior medical officer of the Department of Inland Revenue at Ottawa, has been in Victoria and Vancouver investigating the reports that diseased immigrants were gaining access to Canada from the United States by way of the ports of Puget Sound.

Toronto General Hospital Statistics.—The total number of patients treated in the Toronto General Hospital during the past hospital year numbered 3,875. There were 2,191 males and 1,634 females. On the 31st of December, 1904, there were 276 patients in the wards.

Dr. Wolferstan Thomas, of Montreal, a son of the late general manager of the Molsons Bank, has left Liverpool for the Amazon to investigate yellow and malarial fevers on behalf of the Association of Liverpool Merchants, headed by Sir Alfred Jones, formed for the investigation of tropical diseases.

Dr. Laberge, the Health Officer of Montreal, considers the smallpox statistics for the last few years a fine illustration of the saying, "An ounce of prevention is worth a pound of cure." In 1885 the great epidemic carried off 3,164 people; in 1886 there were only ten deaths. From 1886 to 1896 not a death was reported. In 1897 there were twelve deaths; two in 1898; none in 1899; ten in 1900; two in 1901; ten in 1902; and in 1903 only

Army Medical Corps.—A militia general order states that, for the purpose of promotion, the officers of the permanent active militia army medical corps and officers of the militia army medical corps will be considered as belonging to two distinct branches, and promotion will take place upon the same principle as that in a regiment or corps. Promotions subject to the necessary qualifications will take place as follows: After one year's service, as lieutenant, to be captain; after four years' service as captain, to be major. After ten years' service as major, regimental officers may be given the rank of honorary lieutenant-colonel and their period of service extended, or they may be transferred to the reserve of medical officers or the retired list, as the case may be. two.

HAMILTON HEALTH OFFICER'S REPORT.—An interesting feature of the meeting of the Board of Health was the annual report of Dr. Walter Langrill, Medical Health Officer. There were 705 cases of infectious diseases reported to the department during the year. Out of 180 cases of diphtheria there were 14 deaths. The total number of deaths recorded, not including 58 still births, was 848. Tuberculosis was the cause of 60 more deaths than all other communicable diseases combined, and nearly 11 per cent. of the total mortality. The milk samples analyzed in the year were considered satisfactory. A resolution was passed with reference to the handling of meat on the market, as follows: "That the Board of Health should control the sale and delivery; that, for the sake of cleanliness and health, the meat waggons should be lined with metal, and thoroughly washed after each day's use; that the meat must be covered with a clean cloth while standing on the market or being carted through the city streets; that every meat waggon on the market should be numbered, for the convenience of the inspector."

NOTRE DAME HOSPITAL, MONTREAL.—Dr. Lachapelle submitted the superintendent's report, which, amongst other things, stated that the number of patients admitted to the hospital during the year ended June 30th, 1904, was 2,226, of which 1,313 were men and 913 women; 2,109 were Roman Catholics and 117 Protestants; 1,851 Canadians and 375 foreigners. Of these, 2,226 patients, 1,919 were discharged cured or improved, 166 left the hospital unimproved or recognized incurables, and 156 died at the hospital. The average stay of each patient in the hospital was eighteen days. In the outdoor services, 20,458 consultations were given. In the pharmacy, 26,000 prescriptions were made up. The ambulances were called 1,437 times. Each patient costs the hospital $1.09 a day.

HON. DR. SULLIVAN HAS RESIGNED FROM QUEEN'S COLLEGE.—Hon. Dr. Sullivan has resigned his position as Professor of Surgery in Queen's College. It is just fifty years ago since Dr. Sullivan entered the medical school here, at the time of its foundation, he being one of the first students. Ever since he has been connected with it as tutor, lecturer, and professor. His jubilee will be formally celebrated next spring, during the college convocation week. He will be honored by being appointed honorary Professor of Surgery and being given the degree of LL.D., for his long and faithful service at Queen's. Dr. Sullivan has had a varied and brilliant career. He was Kingston's leading

surgeon for many years. In 1885 he served as Purveyor-General during the North-West Rebellion, and was thanked by Parliament for the splendid service he performed. Hon. Dr. Sullivan is the representative for this district in the Senate.

Ontario Medical Association.—The annual meeting of the Ontario Medical Association will be held in Toronto, June the 6th, 7th, and 8th next, nnder the presidency of Dr. Wm. Burt, of Paris. Strong committees on papers and on arrangements have been appointed under the chairmanship respectively of Dr. A. Primrose and Mr. I. H. Cameron. A considerable number of papers are already promised, and in addition the Committee is pleased to announce that they have received word from Dr. Albert Ochsner, of Chicago, accepting the invitation of the Association to present a paper in surgery. The personnel of the two local committees is as follows: Committee on Papers and Business—Dr. A. Primrose, Chairman; Dr. N. A. Powell, Dr. J. F. W. Ross, Dr. A. A. Macdonald, Dr. Allan Baines, Dr. R. D. Rudolf, Dr. W. B. Thistle, Dr. R. A. Pyne, Dr. Clarence Starr, Dr. J. M. MacCallum, Dr. W. H. Ellis, Dr. N. H. Beemer, Dr. Price Brown. Committee on Arrangements—Mr. I. H. Cameron, Chairman; Dr. R. A. Reeve, Dr. A. H. Wright, Dr. G. A. Peters, Dr. J. A. Temple, Dr. W. J. Wagner, Dr. H. C. Scadding, Dr. H. T. Machell, Dr. Chas. Sheard, Dr. W. P. Caven, Dr. A. McPhedran, Dr. H. C. Parsons, Dr. B. L. Riordan, Dr. P. L. Scott, Dr. W. Goldie, Dr. G. B. Smith, Dr H. J. Hamilton. The executive officers of the Association are: President, Dr. W. Burt, Paris. Vice-Presidents, Dr. J. L. Davison, Toronto; Dr. George Hodge, London; Dr. Edw. Ryan, Kingston; Dr. T. H. Middlebro, Owen Sound. Secretary, Dr. Charles P. Lusk, 99 Bloor Street West, Toronto. Assistant Secretary, Dr. Samuel Johnston, 169 Carlton Street, Toronto. Treasurer, Dr. F. Fenton, 75 Bloor Street East, Toronto. Chairman, Committee on Papers and Business, Dr. A. Primrose, 100 College Street, Toronto. Chairman, Committee on Arrangements, Mr. I. H. Cameron, Sherbourne Street, cor. Gerrard Street, Toronto.

Deaths in Ontario in November, 1904.—The returns for November are not so complete as those received a year ago, as several municipalities failed to report and the number of deaths recorded are much less. The deaths, as reported in November, 1903, were 2,081, and for the same period this year are 1,910, from a reporting population of 1,900,100, but the death-rate per 1,000 remains practically the same, being 12.1 per cent. and 12

per cent. The decrease in the number of cases and deaths of infectious diseases is the most interesting feature of the returns. The total number of cases reported for November this year is 856, and deaths 225, while for the same month in 1903, as may be seen by the table below, 1,062 cases and 259 deaths were reported, which is a case decrease of nearly 20 per cent., and in deaths 13 per cent.

COMPARATIVE TABLE.

DISEASE.	1904.		1903.	
	CASES.	DEATHS.	CASES.	DEATHS.
Smallpox	2	0	5	0
Scarlet Fever	205	8	276	9
Diphtheria	316	45	476	64
Measles	12	1	29	5
Whooping Cough	23	1	30	14
Typhoid Fever	171	43	109	30
Consumption	127	127	137	137
	856	225	1062	259

UNITED STATES.

PURGING BATTLE CREEK.—In an effort to clean out the abortionists, whose work has made Battle Creek notorious, the Physicians' Business Association has ascertained that thirty-two unregistered practitioners were plying their trade in the city. Warrants have been sworn out for these irregulars, and seven were issued on the first day.

DOCTOR'S BILL, $126,000.—Dr. L. C. H. E. Ziegler, in the Probate Court of Chicago, recently filed a bill of particulars as to claims made by him against the estate of Mrs. Harriet G. McVicker, who died recently in California. Mrs. McVicker was the widow of the theatrical manager, J. H. McVicker. Dr. Ziegler's claim in full amounts to $126,000, the bill including copies of contracts which Ziegler says existed between himself

and Mrs. McVicker. The first contract provides that after the death of Mrs. McVicker the sum of $100,000 shall be paid to Dr. Ziegler as soon as possible. This money, according to the contract, was to be given for services as medical adviser.

"Physician" or "Doctor."—The Society of Medical Jurisprudence, of New York, at its last meeting took action leading toward the stricter and more exact use of words, which ought to be commended by all people interested in good English. Hereafter the society is to designate its medical members as "physicians," and not as "doctors."

Rockefeller Laboratory Begun.—The corner-stone of the first building of the Rockefeller Institute, in New York, was laid December 3rd, by Dr. Simon Flexner, chairman of the governing board of the institution. This building will have a frontage of one hundred feet and will be five stories high. The estimated cost is $325,000. A small hospital will be built near it within the next two years.

Quack Advertisements Barred.—The *Boston Herald* announces that it will hereafter exclude from its columns all advertisements of patent medicines and venereal quacks. It is to be hoped that the support which this course will receive from decent-minded folk will encourage other journals, religious and secular, to do the same. There is far too much of this filthy stuff in our newspapers.

Doctors Awarded Liberal Fees.—From the first account of the executors of the estate of the late William L. Elkins, of Philadelphia, it appears that the estate represents a valuation of nearly $32,000,000. Among the payments made were the following for medical attendance: Dr. Louis A. Duhring, $25,000; Dr. J. William White, $1,750; Dr. Alfred Stengel, $1,100; Dr. W. L. McCandless, $440; Dr. W. W. Keen, $150.

Condemnation of the Division of Fees.—At a recent meeting of the Council of the Chicago Medical Society, Dr. Arthur Dean Bevan offered the following resolution which is to be voted on at a subsequent meeting and then, if adopted, to be incorporated as an amendment to the Constitution: "Any member who is guilty of giving or receiving a commission, or of entering into any arrangement for the division of a fee for professional services, which arrangement is not known and fully understood by the patient or party by whom such fee is paid, shall be guilty of unprofessional conduct."

Office Building to Replace Dr. Osler's House.—Dr. William Osler has sold his residence for $55,000. It is a two-story and attic house of colonial design and occupies a lot 59 x 100 feet in the very heart of the city. It was purchased by him about fifteen years ago for $40,000. Possession will be given next May, when Dr. Osler will leave for England. The purchaser will build an apartment house on the property, and the first and second floors will be arranged for physicians' and dentists' offices.

Alma Sanitarium, Alma, Mich.—Dr. Raymond C. Turck has been appointed Medical Superintendent and Manager of the Alma Springs Sanitarium, one of the most delightful institutions of its character in America. He will be assisted in his work by Dr. Harry John Thompson, who for the past two years has been medical superintendent of the Hudson Sanitarium at Hudson, Wisconsin. Dr. Turck has had a splendid training for the work he has been appointed to administer, and the Alma Sanitarium will be sure to be found in the very front rank under his management.

Tribute to Dr. Welch.—A medical society was recently formed in Philadelphia in honor of Dr. William M. Welch. The first meeting was held at Dr. Welch's residence on December 19th, and twenty-five names were enrolled. The society is composed of ex-resident physicians and some of the present resident physicians of the Municipal Hospital. Dr. Welch was for many years physician in charge of this institution, being appointed in 1870 and serving continuously until 1903. At the meeting Dr. Welch was presented with a loving cup. An informal banquet followed.

The Pneumonia Commission.—The commission organized under the authority of the Department of Health of New York City to investigate pneumonia has secured the co-operation of hospitals in Baltimore, Washington, Chicago, St. Louis, Kansas City, San Francisco, Buffalo, Helena, Minneapolis, Denver, and twenty other cities equally scattered, and in Montreal, Canada. These hospitals will carry on the field work and will report on specially prepared blanks. The laboratory work will be carried on in Boston, Philadelphia, Saranac Lake, and at three laboratories in New York City. Twenty thousand cases will be studied in the six months which began November 1st. The central laboratory will be at the headquarters of the Department of

Health of New York City. The commission will study the occurrence and virulence of the pneumococcus and the organisms related to or resembling this in the human mouth in health and disease; the evidence of variation in virulence of the pneumococcus; the occurrence of the pneumococcus in children's hospitals, homes, and asylums, with a study of the bacteria of mouths before and after an outbreak of pneumonia; the vitality of the pneumococcus under various conditions; the study of mouth disinfection and the study of the air in public places, especially in reference to its dust content. The first six months of this year showed a death rate of 19.6 per cent. of the total number of deaths due to pneumonia. The same period in 1903 showed a death rate of 16.5 per cent. due to this cause. The commission will probably make an examination of subway workers and surface car men with the object of ascertaining the effects of these employments on the health of these men.

THE testimonial to Dr. Osler, which was inaugurated some time ago, has grown in importance. About $10,000 has already been raised, and it is hoped that the fund will reach $100,000, or more. It is planned that the testimonial shall take the form of a building, to be erected in Baltimore, to become the receptacle of the library of the Medical and Chirurgical Faculty of Maryland, and to be the home of the various medical bodies affiliated with the faculty, with, perhaps, one or more national medical bodies, if they can be secured.

BRITISH AND FOREIGN.

THE Nobel prize for medicine, it is reported, will this year be awarded to Dr. Robert Koch. He has been presented with a portrait bust and a festschrift on the occasion of his sixtieth birthday.

THE oldest medical works in existence are those of the Chinese, and date back to nearly 3,000 years B.C. Then, as now, they divided their subjects under the captions of healing, cooling, refreshing, and temperate. They have everything divided into classes, and their prescriptions are classified under seven headings, as follows: (1) The great prescription; (2) the little prescription; (3) the slow prescription; (4) the quick prescrip-

tion; (5) the odd prescription; (6) the even prescription; (7) the double prescription. These are applied under four special circumstances and conditions, which in their turn are classified. Fire is an agent in which they have great faith, as also they have in mineral waters.

MANY MEDICAL JOURNALS IN GERMANY.—The number of medical journals in Germany is extraordinarily large, and still on the increase. At the end of 1903 there were 230, and ten more were added in the nine months following.

PROFESSOR WILLIAM JAPP SINCLAIR, of the Victoria University, of Manchester, England, has received the decoration of knighthood. Sir William was present at the Vancouver meeting of the Canadian Medical Association, and was chairman of the section of obstetrics and gynecology when the British Medical Association met in Montreal in 1897.

THE VALUE OF MEDICAL TRAINING.—Sir Conan Doyle, who graduated in medicine and practised for a time before devoting his talents exclusively to the writing of stories, states that there was a time when a young man who was going to do anything in the world was passed mechanically through the bar. He says: "I believe the time will come when the similar young man will be passed through medicine, because I know no other means by which he could get to the fundamental and absolute facts of life. The mere fact that in his training a man has to undergo so searching an ordeal in the most critical years of his life, and pays such enormous attention to detail, is in itself evidence that he receives a splendid training. I have always said that for a man who has mastered 'Gray's Anatomy' life has no future terrors. If our young army officers had five years' study in the same sense that the young medical man has five years' study, we should become the terror of Europe."

EFFECTS OF COMPULSORY VACCINATION IN MADRAS, 1874 TO 1904.—According to *Public Health and Marine Hospital Service Reports,* some interesting data are furnished by a report of the returns of deaths from smallpox in Madras for the last thirty years. In 1874 the deaths numbered 819. During the succeeding ten years the numbers varied from 196 to as many as 4,064. The latter number of deaths from the disease occurred in 1884, and apparently resulted in Government making vaccination compulsory in the city. The compulsory order went into effect

on June 1st. 1884. From that time the diminution in the number of deaths from smallpox has been extraordinary. In 1886 only one death occurred; in 1895 but three deaths were recorded; in 1903 seven. In only three years has the number exceeded one hundred, *i.e.*, 1897, 1898, and 1901. For the rest the yearly deaths have been enumerated in tens, where before 1884 they were counted in hundreds and even thousands. This seems to me favorable testimony as to the efficiency of compulsory vaccination in populated areas.

Correspondence.

MY MEDICAL CREED.

To the Editor of DOMINION MEDICAL MONTHLY:

1. I believe the sons of physicians make the best physicians, and the sons of clergymen the best lawyers, authors, and poets.

2. I believe the schoolmaster, provided he has reached the age of sound judgment and is recognized as a suitable judge, should be able to notice in the pupil such virtues as are essential for the medical profession.

3. I believe that an early age should be selected, provided the pupil evince an adaptability or genius for our art. He should possess marked discernment, a sound judgment, a character of mildness, boldness, and full of sympathy; he should be studious, patient, inventive, and resourceful.

4. I believe the student should have thorough training in the Latin, Greek, and English classics, in fact, should not be allowed to matriculate in medicine except he possess the B.A. or B Sc. degree, or proceed in his medical course unless he combine an arts or science course with medicine, and obtain either of the degrees when he graduates as M.D.

5. I believe that each province or state should have its university, and it alone be allowed to grant degrees, although one or two well-endowed colleges should be permitted to be federated and to teach similar courses, if the state or provincial university be not centrally located and in a city not affording hospital advantages of the highest order.

6. I believe that if four hundred of the universities in the U. S. would cease to exist, the remaining number, eighty-four,

would be more honored, and higher education and university degrees more prized. (Think of the U. S. having three hundred more universities than the rest of the world! *Vide*: The Peerless Atlas of the World.)

7. I believe our medical colleges should not admit the sons of saloon keepers, whiskey sellers, fakirs, licentious or immoral persons, however rich; and that the sons of esteemed and regularly graduated practitioners should be allowed free tuition and every encouragement.

8. I believe every graduate, at graduation, should be made to sign papers, agreeing under penalties not to practise quackery, and to conform his practice to the principles of medical ethics.

9. I believe that those who have acquired great wealth in the disposal of sour beer, pork, lard, or oil, or by lucky ventures in stocks or mines, and wishing to "honor" their name in educational interests, would endow a hall or college in connection with the state university, they would not less honor their names, and it would advance the interests of education much better than to establish a "John Q. Smiths University."

10. I believe it advisable, that a thorough set of addresses relating to medical ethics, medical fees, collection agencies, stock speculations, protective associations, the obligations and duties of court witnesses, medical journalism, quackery, etc., should be given during the last year at college to medical students.

11. I do not believe it advisable, but rather condemnable, except in a very few instances, that we advise any young man to study medicine.

12. I do believe that medical men have more power for good, and really do more good, than the resident clergymen. I believe, also, that if "these leaders of faithful souls and guides of those who travel to the skies" (*i.e.*, the preachers), were better educated and not so many of them the possessors of purchased degrees from Central University (?), Indianapolis, or National University, Chicago, we would respect them better, and they would better advance every progressive movement—even religion.

13. I believe we will never notice the testimonial for a whiskey compound from a Governor or Colonel of the Carolinas, for each is capable by smell and by taste to tell the presence of a leather-headed carpet tack in ten gallons of Bourbon—certainly not when such competent judges exist and know the flavor of mint juleps. The "Reverend Doctor" is not "in it" of late years, as he is evidently buying it *straight* from the next county, or has been reading Box's "Exposition."

14. I believe that nine-tenths of medical journal advertisements dishonor such journals and medical progress, equally as much as would bills announcing the circus, horse races, auction sales, or hockey matches disgrace the inner walls of our churches.

> "Vice is a monster of such frightful mien
> That to be hated, needs but to be seen ;
> But seen too oft, familiar to the face,
> We first endure, then pity, then embrace."

Quis inter nos dubitas. But as these, as pointed paragraphs, are "thoughts of things which thoughts but tenderly touch," each worthy of a full page endorsement or article, we ease our *cacoethes scribendi.*

15. I believe that the "*Hon.*" title which many assume, and which wrongfully, it seems, is given to many, would look better if not attached to names recommending "Swamp Vine Tonic," "Peruna," etc., in our newspapers. The name of Admrial Schley (!) in public print, announcing the virtues of "Peruna," is a sad reflection on medical education in the U. S., and I hope no British admiral or officer will ever so disgrace himself or his country by such insults.

JAMES S. SPRAGUE, M.D.

Stirling, Ont.

Obituaries.

A. S. KIRKLAND, M.D., COLLINGWOOD.

Dr. Kirkland was one of the most widely known men of the county of Simcoe. Born in Islay, Argyleshire, Scotland, in 1844, he was only in his sixtieth year. He came to Canada when a child with his parents, who settled in the township of Mariposa, Victoria county, a few miles from the town of Lindsay. On attaining school age he entered the home public school, from which he passed to Toronto School of Medicine, whence he graduated with the degree of M.D. in 1867. On completing his course in college he turned his attention to finding a location to enter upon the practice of his profession. He chose the village of Nottawa, and in 1868 opened his first office there. A year later he moved to Mount Forest, where his brother William had

settled the year previous. Leaving there in the following year, he returned to this county and opened an office at Duntroon, where he practised successfully until a few years ago, when he moved to Creemore, coming to Collingwood about six years ago.

In 1878 he married Emma, the oldest daughter of the late Henry Watson, who, with a family of two daughters and four sons, survive him. One daughter is Mrs. W. B. Fryer, who resides on Pine Street, and the other, Miss Maude, is a valued and popular member of the teaching staff of the town public schools. The eldest son, Mr. H. S. Kirkland, lives in Winnipeg, where he occupies a responsible position in the Western office of Messrs. Telfer Bros. The other boys, Dalton, Norman, and Murray, are at home.

The deceased was known for his force of character and geniality. He was strong in his convictions, and never swerved from doing that which he believed to be his duty. In politics he was a staunch Conservative, and during the strife of 1893, when the great split occurred in his party and the McCarthyites arose, he stuck to his political party, believing that the policy and party of Sir John A. Macdonald was good enough for him and the best for the country. For many years he occupied the important position of President of the West Simcoe Conservative Association; indeed, it was only at the convention here on the 1st inst. that he relinquished that office and passed the reins over to a younger man. At the same convention he attempted to speak, but was overcome owing to weakness, but before taking his seat he made the nomination which resulted in Mr. James S. Duff being again the candidate for the approaching elections. As a slight recognition of his long and faithful services, he was elected honorary president of the association, an office which has not been filled for many years. While always taking an active interest in the work of the riding association, he never missed an opportunity of assisting the affairs of the local association, of which he was one of the few life members.

Outside of politics, he was an ardent and enthusiastic Orangeman, being an honored and valued member of the Primary Lodge, and also of Preceptory No. 384, Royal Black Knights of Ireland. For many years he also took an active interest in municipal affairs in the township of Nottawasaga. In 1879 he was first elected to the reeveship, which office he held with marked ability for eight or nine years, when he met defeat at the hands of his old-time opponent, Dr. L. McAllister, the present clerk of the township. On being defeated he retired from the arena and did not again seek office.

In religion the deceased was a member of the Presbyterian Church, the church of his fathers.

Besides his wife and family, he leaves one sister, Mrs. McLauchlan, of Egremont township, county of Grey, and four brothers, Hugh and Duncan, who live on the homestead in Mariposa township, John, in Woodville, and William in Mount Forest. Mr. George Leach, of Duntroon, is a brother-in-law.

The funeral service took place at the Presbyterian cemetery. The funeral service was conducted by his pastor, Rev. J. A. Cranston, M.A., and the remains were borne to their last resting place by six old friends of the deceased, Mr. James S. Duff, M.P.P., John Mackay, of Creemore, W. T. Allan, G. W. Bruce, W. A. Hogg, and W. Fryer.

W. E. SITZER, M.D.

Dr. W. E. Sitzer died at his home at Ida, Mich. He had suffered for some time from inflammatory rheumatism, which caused heart failure. Milton was his home until he graduated from Trinity College, Toronto, twelve years ago, when he went to Ida. He had a large practice there and was very popular.

HENRY PIGEON, M.D.

Dr. Henry Pigeon, Peterboro', died very suddenly on Dec. 7th, at his home, Charlotte Street. He had been ill since Saturday, Dec. 3rd, from a cold, but gradually improved until the morning of his death. About eleven o'clock he retired for a sleep, but shortly before one o'clock his heart became violently affected, and death resulted. Dr. Pigeon was born in Gloucestershire, England, and had been practising in Peterboro' for upwards of twenty-one years. Dr. Pigeon was twice married, and is survived by a widow, four sons, and one daughter.

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Original Articles.

A CASE OF GENERAL INFECTION BY THE STAPHYLOCOCCUS PYOGENES AUREUS, STREPTOCOCCUS PYOGENES AND PNEUMOCOCCUS, WITH A REMARKABLE SEQUENCE OF CLINICAL MANIFESTATIONS.*

By H. B. Anderson, M.D., L.R.C.P. (Lond.), M.R.C.S. (Eng.)

Associate Professor of Clinical Medicine, University of Toronto.

Elizabeth P., aged thirty-nine years; English; widow; occupation, cook; was first seen by me on Christmas Day, 1903. About five weeks previously she had been taken ill with severe pains in the back of the head and neck, chills, fever and profuse sweats. She soon developed pain in the lower part of the left chest, cough, and considerable expectoration of yellowish sputum. The patient looked very ill, was pale, emaciated, and had an expression of marked suffering. The attacks of chills and fever had been recurring daily, the patient feeling comparatively comfortable in the intervals. I had her sent into St. Michael's Hospital, and I am indebted to Dr. A. J. Fraleigh for having kept careful notes of her case during her subsequent illness. Family history shows no evidence of tuberculous taint; mother had

*Read before the Toronto Clinical Society, October, 1904.

suffered from rheumatism, and had an attack of pneumonia while the patient was in the hospital.

Personal History.—Patient had suffered from the usual diseases of children, and six years ago had had a severe attack of typhoid fever. During the winter of 1902 she had been laid up for three weeks with some obscure complaint, during which time she says she had a hemorrhage from the bowels. About the same time she complained of pain in the left hypochondrium, and says she noticed a lump there. During the past summer (1903) she had been cook to a camping party in Southern Ohio, but had enjoyed good enough health. Patient had never been very robust. Her best weight was 120 lbs. She had always worked hard. Menstruated irregularly. She was in very fair health when she returned to Toronto in September, 1903. About the middle of November she was taken ill with chills, sweats, etc., as before stated.

Condition on Admission (Dec. 27th, 1903).—She is a small, delicate and emaciated woman, weighing 95 lbs.; she is pale and has a worried, anxious, pained expression. Skin is dry, harsh, with slight branny desquamation. It is of a slightly yellowish tint, with patches of dark-brownish pigmentation about the forehead, face and neck.

Tongue is red and covered in patches with a white fur. Fauces and pharynx are congested. Bowels regular.

Patient complains of shortness of breath. Chest is thin, clavicles prominent; expansion poor, but equal on two sides. Nothing definite detected on palpation or percussion. Some large bubbling rales were heard over the larger tubes and smaller bubbling rales at the right apex.

Apex beat is in normal position. Area of cardiac dulness not appreciably increased. A distinct mitral systolic murmur is to be heard, traceable into the axilla.

Pulse is not very rapid—96, but is rather weak and compressible. Superficial vessels are not appreciably thickened.

Liver was readily palpable an inch below the costal margin.

Spleen is much enlarged and easily palpable nearly as low as the umbilicus. There is extreme tenderness on pressure over the whole splenic region.

Examination of the sputum showed no tubercle bacilli, but staphylococci, streptococci and pneumococci were present; also numerous pus cells, epithelial cells and some red blood cells.

Urinalysis showed nothing of importance. Blood examination showed 3,770,000 reds, 6,900 whites and 80 per cent. hema-

globin. Stained, dried films showed no morphological alteration in the cells and nothing special in the differential count. Repeated examinations were made for the Plasmodium malariæ on account of the patient's residence during the previous summer, and the presence of an enlarged spleen, with recurring chills and sweats. The results were always negative. Repeated Widal examinations were also negative. The temperature at this time was ranging from 98 to 99 and 100 deg.; pulse about 90. Chills had ceased for the past few days.

A diagnosis of septicemia of some sort, with endocarditis, bronchitis and acute splenic tumor with perisplenitis was made. The latter might have been due to infarction. The point of entrance of the infection it was not possible to discover.

A few days after coming to the hospital—January 1st, 1904—she had a chill, temperature rose to 102 2-5, and well marked physical signs of pneumonia and pleurisy appeared at the left base, though not involving a large area. January 4th, the temperature rose to 103 2-5, next day falling to normal with profuse sweating. January 8th, the temperature rose to 103 4-5, and examination showed intense engorgement of the vessels of the fauces, naso-pharynx and pharynx, with bleeding from some of the distended vessels. The throat felt very sore, and there was severe pain in the left ear and left side of the neck. January 9th there was severe pain in both ears, and the patient was quite deaf. The temperature, however, was lower, 101°. The pain and deafness continuing, Dr. Wishart saw her on January 12th, and incised both drum membranes. Some pus escaped, and the patient felt better. On January 13th, however, she had a chill lasting fifteen minutes, and temperature rose to 104 2-5, and the next day an intense and very typical erysipelatous rash appeared over the forehead and face, extending to the head and over the neck. The rash gradually subsided, the temperature falling to normal on January 18th.

About February 1st, severe pain, tenderness and slight swelling appeared in the knee, ankle and wrist joints. The slightest movement was unbearable. At the same time all the tissues of the legs became extremely tender, the tenderness not being limited to any special structures, as muscle, nerves, or veins.

The clinical condition was such as would ordinarily be called rheumatic, but was no doubt due to the infection acting on these structures. The pain and tenderness in these parts were most intractable, lasting, with alternating periods of improvement and exacerbation, for months. The swelling in the joints was also variable, at times disappearing in some of them and reap-

pearing in others. There was never any appearance of pus formation in connection with them.

Coincident with the joint involvement, painful subcutaneous nodules appeared, scattered in small numbers irregularly over the legs, thighs, buttocks, forearms and arms. At first the skin over them was moveable and of natural color. As the nodules increased in size, however, the skin became inflamed, of a dusky-red color, and several of them broke down, a thin pus, mixed with necrotic shreds of tissue being discharged. Others underwent involution without pus-formation and were absorbed. Irregular, excavated, indolent ulcers were left in the various places where the nodules discharged. These were painful, but gradually became clean and slowly healed in the course of about three months, except one large ulcer behind the lower third of the left leg.

Bacteriological examination of the pus showed the presence of the staphylococcus aureus and albus and the streptococcus.

Cultures were made from the blood by withdrawing the fluid from the median basilic vein by means of a sterilized hypodermic syringe, and inoculating it on agar and blood serum tubes. On the first occasion no growth was obtained, but on a subsequent trial the staphylococcus aureus and albus were found.

Examination of the blood at this time showed 2,736,000 reds, 116,000 whites, and 70 per cent. hemoglobin. The marked leucocytosis was no doubt the result of the local suppurative processes. The temperature at the same time rose to 103, and continued with daily variations from 99 to 102 deg. for five weeks. It was of septic type. March 13th the temperature reached 103 1-5, and on the 14th, 104 2-5. There now developed severe pain over the whole of the right chest, the respirations were rapid and shallow, the cough short and hacking. The patient was extremely ill, had nausea and vomiting. Examination of the chest revealed a marked apical pneumonia with generalized pleurisy on the right side. The pain on respiration was very intense and this was increased on any pressure.

The liver was palpable about two inches below the costal margin, there was much tenderness in this region and the slightest upward pressure produced much suffering. This was evidently due to perihepatitis. From the character of the patient's condition I thought that the pneumonia was probably pyemic, but was surprised when the temperature suddenly dropped on March 22nd, the 9th day, and the general condition improved, the lungs gradually clearing up without any discharge of pus.

Examination of the sputum at this time showed streptococci, staphylococci and pneumococci. The onset and subsequent course of this attack of pneumonia make it probable that it was due to the pneumococcus. She improved materially for a time, and then about April 1st extreme tympanites set in. The abdomen was blown up like a balloon. There was no tenderness except about the liver and spleen. This condition lasted for a few weeks, and then gradually disappeared.

For the next two months nothing of importance developed. The temperature continued to run from normal to 100 deg., or occasionally to 101 deg. The ulcers were gradually healing, and the general condition was improving. By the 1st of July she had so far recovered that her friends wished to take her to the country, so she left the hospital on July 7th. Her people were poor and unable to give her proper care and nourishment. They did not send her to the country, but kept her at home, in a small, poorly lighted and ventilated room. After a time she developed bedsores over all the prominences of the back, she grew gradually weaker, and finally died about the middle of September. I did not see her after she left the hospital, but from information received, believe that death was due to the sepsis from these bed sores, and gradual exhaustion. Her leaving the hospital was to be regretted, for at that time she had been gradually gaining for two months, and with proper care would probably have recovered

To sum up the case, the patient in the first instance had an infection, presumably by the streptococcus and staphylococcus with resulting endocarditis, acute splenic tumor and perisplenitis. She then had a left basal pneumonia and pleurisy, acute naso-pharyngitis and double suppurative otitis media, the latter no doubt by direct extension from the naso-pharynx. Then the local effect of the streptococcus was shown in the skin by the attack of erysipelas. Next the rheumatic pains in the joints and limbs developed, and it is interesting in this connection to recall the fact that some of the obscure rheumatic attacks which may develop are of pyogenic origin. The subcutaneous abscesses were demonstrated to be associated with the strepto- and staphylococcus. The pneumonia at the right apex was apparently of pneumococcic origin judging from its course. The pleurisy, with which it was associated, by extension through the diaphragm, produced the perihepatitis. The intense distention of the abdomen, which appeared later, was probably partly caused by the extension of the peritoneal inflammation from about

the spleen and liver, and partly the result of the general toxemia, with paresis of the muscular wall of the bowel.

The case points to the importance of noting the inter-relationship of disease in various organs and structures, and impresses one with the importance of seeking the etiological rather than an anatomical diagnosis, whenever possible. The patient presented in succession the clinical evidences of a general infection, endocarditis, acute splenic tumor, perisplenitis, left basal pneumonia and pleurisy, acute naso-pharyngitis, double suppurative otitis media, erysipelas, "rheumatic" pains and swelling in numerous joints, intense general pain and tenderness in the limbs, multiple subcutaneous abscesses with resulting indolent ulcers, right apical pneumonia and generalized right pleurisy, perihepatitis and paralytic distention of the bowels. All these conditions being directly or indirectly traceable to the pathogenic organisms before mentioned.

The treatment adopted during the case was largely an attempt to maintain the general systemic condition, and to meet prominent symptoms as they arose. Abundance of nourishment, stimulants, strychnine and the bitter tonics, etc., were employed. From the "mixed" character of the infection there was no reason to hope for much benefit from antistreptococcic serum. It was used, however, on two occasions during the course of the illness, but with no apparent benefit.

THE VOMITING OF PREGNANCY.

By S. J. Elkin, M.D., Winnipeg.

In the hope that we may understand more fully than we do the conditions present in the vomiting of pregnancy we may compare with it other phenomena to be met with in the human body.

The various organs and tissues of the body are supplied with nerves that furnish to the nerve centres and sensorium a constant and accurate report of the organ or tissue, and to give timely notice of any alteration that may occur in the organ itself or in its environment from intrinsic or extrinsic causes. These centres are in direct communication with the various organs by

other sets of nerves, and can through them exert to a certain extent a modifying effect when such conditions diverge from what should normally exist.

These nerves may terminate in voluntary muscle, in involuntary muscle, in the vaso-dilator or vaso-constrictor tissue of vessel walls, or in glandular secreting cells.

Through this mechanism we find impulses carried to nerve centres and back again along the same or other nerves, constituting reflex acts.

Some reflexes act directly on the part of the organism primarily irritated, as in the case of ciliated epithelium carrying along the irritating particles adhering to its surface.

Other reflexes, while they may act on the part primarily irritated do so indirectly. When the sole of the foot is tickled the foot is drawn away by the action of the muscles of the leg. A glycerine suppository in the rectum may cause reflex contraction of the involuntary muscle in the entire large intestine in order to remove the irritant. Some bacteria gaining entrance to an organ may cause increased blood supply to the organ by reflex vaso-dilator action on the blood vessels going to the part to assist in their destruction and removal. A foreign body on the cornea may cause an increased flow of tears through reflex stimulation of the secreting cells of the lacrymal gland to assist in washing away the offending particle.

The evident intention in each case is to rid the body of the irritant, and in the examples given, the part from which the stimuli originated, though acted on ultimately, was not acted on directly.

There are, however, examples of other reflexes where the part irritated primarily is not acted on reflexly, either directly or indirectly. A polypus, hardened cerumen, or a piece of absorbent cotton impacted in the external auditory meatus may after a time cause an irritation that may produce a reflex action. The reflex in this case is not directed to the external auditory meatus, but may be a more or less continuous cough, the evident intention being to remove something from the respiratory tract. This may be accounted for by the fact that a branch of the pneumogastric nerve is distributed to the external auditory meatus and stimuli are carried to the same centres as stimuli from irritation of a branch of the same nerve situated anywhere in the respiratory tract. Another example of a similar nature is where a bright light shining on the eyeball produces a sneeze.

The functions of these reflex acts are to free the organism from some condition or substance tending to interfere with its

proper physiological condition; although in the latter two examples the effort was misdirected.

When we study the phenomena manifest in the vomiting of pregnancy we may see that it also is a misguided effort on the part of the organism to free itself from a condition that while it may be physiological, yet it has not been customary to the individual. The presence of the fetus in the uterus produces a continuation of stimuli. These stimuli may go to the spinal cord and cause a reflex which acts directly on the uterus itself, causing contractions of its fibres, and thereby producing an evacuation of its contents, in which case the organism has succeeded in removing from itself the offending object.

The stimuli may, however, be carried to the medulla, in all probability, along the pneumogastric nerve through its branches from the hypogastric plexus. These stimuli on reaching the medulla may be reflected from the vomiting or other important centres situated there along the pneumogastric nerve to the muscular part of the walls of the stomach, and cause irregular contractions tending to induce nausea, vomiting, etc., and along other nerves assisting in producing the same or other results. Thus, in one person we may have nausea, in another vomiting, in another anorexia; others, again, may have a perverted appetite with a desire for various articles of food, nutritious or otherwise, and again others may have increased appetite with improved digestion. These variations depend to a great extent on the character of the stimuli, the condition of nervous excitability of the individual, the mode of onset of the irritation, and the power of adaptability of the individual to her changed condition.

The disturbance in the person's system may not be in proportion to the strength of the stimuli, for in cases of twin pregnancies where the increased rapidity of enlargement of the uterus would lead us to infer increase in number or strength of the stimuli the amount of disturbance to the individual may not be correspondingly increased.

In the same way a slight irritation applied to the sole of the foot may cause the sensation of tickling, and produce a reflex causing the foot and leg to be jerked away suddenly, and a shudder to pass over the entire body. If, however, the irritation be increased to that of moderate intensity we may produce a pleasant sensation of itching being relieved, and tend to cause no reflex response. Again, if the irritation be further increased we have a painful sensation produced, and an irresistible desire to draw the foot away.

Possibly in the same way some cases of vomiting of pregnancy are relieved where the existing intrauterine irritation is just sufficient to cause reflex gastric disturbances, and by the addition of the irritation of cervical dilatation by the physician the effect is an amelioration of the symptoms, or on the other hand by the application of cocaine to the cervix the irritation may be lessened to such a degree as to produce a similar result.

The condition of nervous irritability of the person may have considerable to do with the severity of the reflex disturbance produced. How much oftener do we see convulsions produced reflexly in infants and young children than we do in adults. We may find a woman pass through her first pregnancy with little trouble, and when reduced in strength, through lactation, become again pregnant, and in this weakened state suffer severe gastric disturbance. The most severe case of vomiting of pregnancy I have so far seen was a similar one where during the first pregnancy very little unpleasantness was experienced. The woman while nursing a fine boy became again pregnant, and so serious did her condition become from vomiting and loss of appetite that after a consultation it was considered necessary to empty the uterus in order to save her life. She rapidly regained strength and went through her third pregnancy with little inconvenience. In all probability her reflexes were so affected by her weakened state as to bring about the condition that seriously threatened her life.

The mode of onset of the irritation and the power of adaptability of the person to her changed condition have no doubt a considerable influence on the vomiting.

We find in sea sickness a reflex action where the chief factor in the causation is in all probability an increased irritation in the semicircular canals caused by the motion of the vessel. This is carried to the medulla and produces a train of reflex symptoms, the chief of which is a disturbed condition of the stomach. The more sudden the change from smooth to rough water the more certain are the symptoms of sea-sickness to be produced.

In sea-sickness also we have an example of tolerance or adaptability of the individual to its changed environment, for we find after a short time—sooner in some cases than in others—that, though the conditions causing the distress have continued, yet the symptoms of the trouble abate from an established tolerance, or the adaptability of the individual to its altered surroundings.

This may also explain why in the pregnant woman her vomiting usually ceases about the fourth or fifth month, though

the enlargement of the uterus, and consequent irritation, are rapidly increasing until the end of pregnancy.

It is said that sailors accustomed to the motion of a sailing vessel may become sea-sick on board a steamship, or vice versa, those accustomed to the steamship may become sick on a sailing vessel; acquired adaptability to one kind of motion does not protect them from the consequences of the other.

Here, again, in sea-sickness we find children are rarely affected, though we might expect the contrary from the heightened activity of their reflexes compared with that of adults, and also from the comparative ease which there is in causing children to vomit. Possibly children from their habits of constantly playing and tumbling about have become accustomed to frequent changes of position, and the motion of the vessel being somewhat similar the centres affected have acquired a greater power of adaptability to such influences.

May not some systems accommodate themselves quickly to their altered condition, and thus escape many of the unpleasant effects experienced by others?

When we find in a case of pregnancy irritation of a particular intensity acting on nerves and nerve centres particularly susceptible to such stimuli, and find such commencing suddenly in a person with little power of adaptability we cannot wonder that there may be produced a train of symptoms of serious importance, especially where the major portion of the reflex is directed towards one susceptible organ—the stomach.

Taking into account the nature of the causes producing the vomiting of pregnancy and the influences in different persons lessening or intensifying such production it may be helpful to us in endeavoring to remedy this distressing accompaniment of pregnancy when it exists.

The irritation produced in the walls of the uterus by the presence within it of a rapidly increasing body, and the stretching of muscular fibres and nerve tissue, and the increased vascularity accompanying the change cannot be obviated except to a moderate degree.

In a few cases this irritation may be beneficially increased by the additional irritation of dilatation of the cervix, but the cases suitable for this treatment are rare indeed.

Another class also small in number may be improved by applications of cocaine to the cervix, but the success in many cases is disappointing since we cannot apply the medication to the part from which the irritation arises. Medicines may be administered with a view of lessening the irritability of the

nerves and nerve centres affected, but their action also is frequently disappointing.

Oxalate of cerium and other drugs have been given with the evident intention of lessening the irritability of the nerve endings in the stomach wall, but their use has proved of little avail in the majority of cases.

The cases, where the patient feels on the verge of vomiting and a sneeze or a paroxysm of sneezing occurs and immediately dispels the impending vomiting, may give us a clue to a more rational treatment. If the patient or the physician can in any way divert the surplus energy, and have it expended in some other way than by a reversed peristaltic action of the stomach, much benefit may be derived.

In some cases the taking of food frequently may be sufficient to use up the energy as it accumulates and prevent it from exerting an intensified effect on the nervous mechanism of the stomach, for vomiting seems to result from an exalted state of stimulation.

We find that many irritating drugs taken into the stomach in small doses cause the sensation of hunger and improve the appetite, and if taken in large doses produce greater irritation ending in vomiting.

The frequent introduction of food into the stomach may, in some cases, act beneficially by using up the energy before it has accumulated to a disturbing degree. I have seen this in seasickness where food was taken and expelled, and another meal was indulged in immediately after and retained.

Our line of treatment must therefore be as varied as the number of influences causing and modifying this distressing condition, and we must take into account the peculiarities of each patient, and the accompanying conditions to be met with in each individual case if we expect our treatment to have a beneficial effect.

Selected Article.

THE BRADSHAW LECTURE ON THE TREATMENT OF ENTERIC FEVER.*—(*Continued.*)

By F. Foord Caiger, M.D. (Lond.), F.R.C.P. (Lond.)
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According to Dr. Dreschfeld, the good effects of the cold bath are readily seen. The pulse becomes slower and the tension of the artery is increased; the number of the respirations diminishes, the tongue becomes moist, and the appetite improves. The nervous system is especially relieved, the delirium disappears for a time, the patient becoming much calmer and the sleep more natural; while the diarrhea, when present, if not diminished after the first two or three baths have been given, is certainly not increased. The cold bath is contraindicated when the cardiac action is weak and irregular, the pulse intermittent, or cyanosis marked; as also with intestinal hemorrhage or perforation and in the case of old persons and young children. The chief drawbacks which appear to militate against the general adoption of the cold-bath treatment are the cumbersomeness which admittedly characterizes the procedure and the increased tendency to relapse which is observed to follow its employment. The former objection, having regard to the amount of labor involved in repeatedly placing the patient in the bath and subsequently removing him, usually proves to be well nigh insurmountable in private practice. In a hospital ward the objection has less weight, but the disinclination usually evinced by the patient and the prejudices of his relatives are factors which have to be reckoned with. So true is this that Osler, while continuing the use of the bath, says that he "prays for a method which, while equally life-saving, may prove to be, to put it mildly, less disagreeable." Although a rectal temperature of 102.2 degrees was taken by Brand as the determining point for the bath, to be repeated if necessary every three hours, with an immersion of from 15 to 25 minutes or more at a tempera-

*Delivered at the Royal College of Physicians of London on Nov. 15th, 1904.

ture of 68 degrees, irrespective of the onset of shivering, many of his followers have pursued a less drastic method. Some physicians, for instance, have taken 103 degrees, or even 103.5 degrees, as the determining temperature, and have removed the patient on the occurrence of definite shivering. It is generally admitted, however, that the results obtained under these conditions in practice have fallen short of those achieved by Brand.

Again, the "graduated bath," as it is termed, has been widely recommended, originally, I believe, by Ziemssen. By this method the temperature of the bath which at the moment of the patient's immersion is about 90 degrees, is afterwards rapidly reduced by means of ice to 70 degrees, or slightly lower. Sir William Broadbent, who speaks well of the treatment, is inclined to prefer immersion at an initial temperature of 80 degrees, rather than 90 degrees. The graduated bath is certainly more adapted to the condition of patients whose circulation is feeble and in whom there is much respiratory distress, those, in fact, who are unable to bear the shock of sudden immersion at the lower temperature, which, on the other hand, is of such marked value as a stimulant in cases where there is considerable nervous depression. This is equally true, whether the bath be employed as a systematic measure of treatment, or whether, as is more usual in this country, it is simply used as an occcasional weapon against an unduly high temperature.

Some thirteen years ago, Dr. James Barr, of Liverpool, advocated the treatment of typhoid fever by means of the continuous tepid bath, the patient being immersed in a tank for a period of from one to three or more weeks, in fact, if necessary, during the whole course of the fever. The temperature of the water is maintained at a level of but a few degrees below the normal temperature of the body, and in proportion as the pyrexia abates the temperature of the water is raised, until at the completion of defervescence it nearly approximates to that of the patient. Dr. Barr claims for his method that it obviates the drawbacks which are incidental to Brand's, while attaining the same good results. He states that of forty cases treated by the continuous bath a fatal result occurred in only one instance. Such a record is, of course, eminently satisfactory, but relapses, as Dr. Barr, I believe, himself admits are unduly frequent. One can hardly think that the tank treatment can be a popular one with patients and the method is impracticable under ordinary conditions in private practice.

More recently, Dr. Barr has devised a method which, though

maintaining the hydrotherapeutic principle in a modified form, is attended with less inconvenience. The patient, instead of being immersed in tepid water, is slung in a hammock, which is stretched on a frame erected over the bedstead. The surface of the abdomen and the lower part of the chest are covered with a light flannel compress on to which a stream of water at a temperature of 80 degrees is allowed to trickle continuously, the excess of water as it escapes being collected in a bucket placed beneath the hammock at its most dependent part. The patient wears no body linen, but his legs and thighs are covered with a blanket, and his comfort is increased, if necessary, by keeping a large spirit lamp continuously burning under the bed. By this means the sensation of chilliness is to a large extent removed while the evaporation of the water is facilitated and its refrigerative influence is correspondingly increased. A large bed cradle is placed over the patient, covered only with a single sheet so as to interfere as little as possible with the vaporization of the water. Dr. Barr speaks very highly of this method in severe attacks, and says that it has so far been successful in every case in which he has employed it.

Another means of refrigeration which has been used a good deal is what is known as the "ice cradle." The patient, but lightly, if at all, covered, lies under a bed cradle in which are hung a number of little pails containing ice. These are frequently replenished, and as a result the temperature of the air surrounding the patient is maintained at a low level. It probably falls far short of the cold bath as a systematic method of treatment, but it is certainly devoid of the difficulties which are incidental to the bath on whatever lines it may be employed. From a purely antipyretic point of view the "cold-air bath," as it might be termed, is excellent, but it is without any influence in stimulating the excretory activity of the skin and kidneys and thus promoting the elimination of toxic products which is so marked an attribute of the cold bath.

The use of the wet pack, whether applied to the whole surface of the body or to the chest and abdomen simply in the form of what is sometimes called an "ice poultice," though capable of abstracting a considerable amount of heat from the skin, is mainly useful by its sedative effect on the nervous system. Although the temporary application of a cold compress to the abdominal wall for the relief of pain or tenderness is often of the greatest value, the influence it exerts on the internal temperature of the body, as revealed by a thermometer placed in the

rectum, is frequently very transitory. And the same thing is true of the practice of cold sponging of the surface. Cold sponging, like the occasional application of a wet pack, or an ice poultice, though often employed with undoubted advantage in special cases, can hardly be regarded, for reasons that I have already mentioned, as a serious rival to the cold bath as a systematic method of treatment.

Of the various antipyretic drugs which have been used in combination with the cold bath, sulphate of quinine is the only one which appears to merit any confidence. It has been extensively used by some continental authorities as an adjuvant in certain cases in which the pyrexia has proved refractory to the influence of cold bathing alone, and apparently with success. The tonic effect which quinine exerts on the circulation, an effect which, it should be mentioned, is not usually apparent during the first twenty-four hours of its administration, though remarkably persistent, has led to its being employed in combination with a tepid bath in cases where the presence of either cardiac or pulmonary disease or great circulatory enfeeblement renders immersion in cold water inadmissible. In these circumstances a marked antipyretic effect may often be obtained in addition to the other benefits conferred by hydrotherapy. The liability of quinine, however, even when guarded by opium, to set up vomiting, when given in large doses may prove an absolute bar to its employment.

3. Next, with regard to antiseptic treatment. Originally, no doubt, antiseptic drugs were administered on the supposition that they were competent to exert a direct bactericidal effect on the specific organism present in the intestine. Murchison, in formulating rules for the treatment of enteric fever, gave as the first indication, to neutralize the poison and improve the state of the blood, and he further stated that antiseptic agents might be expected to act directly on the poison in the intestinal canal. Niemeyer's teaching was in the same direction. Since the days of Murchison and Niemeyer our knowledge of the specific agent concerned in typhoid fever has been, to say the least, considerably advanced, and it is now recognized that any attempt to achieve the destruction of bacilli in the lower region of the intestinal canal by the administration of antiseptic drugs by the mouth is nothing short of futile, unless given in such strength or in such quantity as to be extremely prejudicial to the patient.

Without claiming for a moment that antiseptic drugs are competent to exert a direct germicidal effect on organisms present in the intestine, blood, or tissues, it is not unreasonable

to expect that even when given in relatively small and harmless doses they might be capable of exerting some restricting influence on the multiplication of bacteria in the mucous membrane and contents of the bowel, whether specific or otherwise. That such is actually effected in respect to the various putrefactive organisms which, as a matter of fact, are generally more resistant than the pathogenic species to the action of antiseptic agents, is obvious from the marked diminution in the fetor of the stools which is usually soon apparent as the result of their administration. Further, recognizing, as we do, the extent to which the vital activities of micro-organisms are influenced by very slight changes in their environment, it is surely not too much to assume that, as the result of the presence of even very minute quantities of an antiseptic, typhoid bacilli present in the intestinal mucosa and at a somewhat later stage in the blood and tissues may be so influenced as to be rendered in some degree less capable of elaborating their particular toxin than would be the case were the fluids in which they were living free from any trace of such substance. That the virulence of a micro-organism could be artificially reduced by adding a small quantity of an antiseptic to the culture medium was clearly established by Pasteur, who for a time was in the habit of utilizing this method exclusively for attenuating cultures of the bacillus anthracis in the preparation of his anthrax vaccine. That the blood may actually become impregnated with the antiseptic is proved by its appearance in the urine, as in the case of carbolic acid, urotropin, and others, and the fact that certain volatile oils, such as cinnamon and eucalyptus, which are known to possess antiseptic properties, may be readily detected in the breath and in the exhalations from the skin as a result of their continued internal administration is additional evidence to the same effect.

That the antiseptic method, though frequently misunderstood, is founded on a scientific basis is undeniable. This was vigorously maintained by Dr. I. Burney Yeo, who has done so much to popularize its employment. We do not give antiseptics in the belief that they are competent either to slay the germ of typhoid fever or to neutralize its toxin, but in the confident anticipation that they will exert a restraining influence on the propagation of the specific bacillus and its congeners and on the various putrefactive organisms which are associated with it in the alimentary canal. Moreover, even if antiseptic remedies are incompetent to exercise any inhibitory influence on the multiplication of bacilli which have already passed into the circulation and have been conveyed to distant organs, we are prepared to believe that

some degree of attenuation of these organisms may be brought about by the presence of even minute quantities of an antiseptic in the blood and tissues of the body. In other words, we believe that the morbific agent may be rendered less capable of elaborating a virulent toxin in consequence of the modification of its environment which the presence of an antiseptic implies.

To obtain the full benefit of the antiseptic method its adherents not unnaturally insist that the remedies should be given from an early stage of the disease and in adequate and sufficiently frequent doses. Under these favorable conditions it is claimed that the following clinical indications will be secured: first, that the duration of the attack will be curtailed and the intensity of the fever lessened; secondly, that the mouth and tongue will be kept more clean and moist, with the result that greater comfort will be insured and the appetite maintained; thirdly, that diarrhea will be controlled, meteorism will be held in check, and the fetor of the evacuations prevented; fourthly, that the incidence of the most serious complications—that is to say, hemorrhage and perforation—will be rendered less frequent; and, finally, that the duration of convalescence will be shortened. Some observers, moreover, believe that the chance of relapse is materially lessened if the treatment be continued throughout the earlier period of convalescence.

(To be continued in March issue.)

Clinical Department.

Ectopic Pregnancy—A Case Report. H. C. Crowell, M.D., Kansas City, Mo., Professor Diseases of Women, University Medical College, in *The Kansas City Medical Index-Lancet.*

Mrs. D., wife of a physician, and herself a pharmacist, aged thirty-two years, weight 177 pounds, 5 feet 9 inches in height, makes the following history: Five years ago, had a full term child. Has since had numbers of abortions, not induced, occurring at from fifty to sixty days after conception. Sometimes would flow from thirty to forty days, succeeding the abortion. Has been anxious for a full term gestation. Before marriage was a school teacher and enjoyed good health.

Dates the beginning of pelvic trouble back to 1896-7, when she was in Texas, and then suffered with metrorrhagia for ten months, which was followed, it is said, by the full-term labor. After the child-birth, had no trouble until about two years ago, when she had pain in the region of the appendix, which subsided after three to six days of catharsis and the bed. January 31st, 1894, was awakened in the middle of the night with intense pain in the region of the right ovary. Two physicians were called and administered morphine. She had chills with high temperature, and was said to be very much blanched. The pain was of a lancinating character. Was confined to the bed for seven days; was sleeping when attacked with this pain. During the months of March, April and May was attending the St. Louis Fair daily, writing for the "local press bureau," during which time seemed to be in normal condition, except that she experienced a constant tenderness in the right groin, which led her to favor it in walking and standing.

She left St. Louis June 1st, returning on the 14th and remained till July 1st. She menstruated on the last day of May and June 1st, 2nd and 3rd. On the night of June 4th had intercourse with conception in view.

On June 5th was very sick, following a sixty-mile trip, vomiting and purging badly. July 1st took sleeper to Parsons, Kan., next day took a chair car to Bartelsville. The next day was in a wreck. Went from Bartelsville to Cushing. In climbing into a caboose after the wreck seemed to injure or make worse her side. Began menstruating four or five hours before getting into the caboose. Was one day in bed at Cushing on

the 4th of July. On July 5th took a chair car to Jones City where she was in bed the 5th, 6th and 7th menstruating. July 8th took chair car to Oklahoma City, where she was in bed one week, still flowing. At this time had much gas in the intestines. July 15 took a chair car to Davenport, Okla., where she was in bed two days. Menstruation temporarily ceased; July 18th took a day coach to Shawnee, Okla., where she rested one night, then went to Alderson, Okla., where she rested several days and was curetted—material supposed to be the result of an abortion was obtained—was removed from Alderson to McAllister on a stretcher and placed in the hospital. Her temperature at this time was never above 100 deg. F., pulse 88.

At McAllister, July 25th, she had the first sharp pain since January 31st, though the dull pain with soreness had persisted constantly. In the hospital at McAllister she was examined under an anesthetic and her trouble was thought to be bowel infection and antiphlogistic treatment was instituted. The pain continued to grow worse with an increasing tympany, was unable to void urine voluntarily. July 31st she was removed to the University Hospital, Kansas City.

On August 1st Dr. Jackson made a vaginal incision into a mass discovered posterior and to the right of the uterus. This mass had been observed for at least twelve days prior to coming to Kansas City. An abscess was suspected, but proved to be an accumulation of blood and blood clot, much of which was scraped out and the cavity drained with gauze. Patient remained in the hospital until August 7th, the drainage continued till August 14th. On the 9th of August had an elevation of temperature. On the 10th slept well. On full diet on the 11th. On 11th, 12th and 13th had bad sleep sweats. On the 13th had a copious dejection from the bowels, the result of a saline purge. At 4.30 a.m. on the 13th was taken with acute pain in the left side in the region of the ovary.

The left leg was flexed upon the abdomen and her expression was pinched. At 5 a.m. was taken with a tearing sensation and the flexed left limb went down. Had a severe chill and temperature of 104 4-5 deg. with slight nausea and some headache. She was placed on a stretcher and brought to the University Hospital. The preceding history was furnished by the doctor. On August 13th, Dr. Jackson being sick in bed, I was asked to see her. I found the temperature 102 deg. F., pulse 100, with some pain in left side of pelvis. The serious symptoms of the morning had subsided to such a degree that it was deemed safe to wait till morning to operate. Epsom salts were given prepara-

tory to operative interference; in the morning, August 14th, Sunday, assisted by Dr. Howard Hill, at 10 a.m., patient was taken to the operating room, temperature 101 deg., pulse 100. There was considerable tympany with rigidity of the abdominal muscles. Slight bloody discharge from vaginal incision, previously made. Incision enlarged and a large amount of clotted blood and decidual material removed. Thorough irrigation was followed by the packing of the cavity with a large amount of iodoform gauze. The abdomen was then opened. The omentum was found bound down to the pelvic organs.

On the left side a ruptured pyosalpynx was found surrounded by old and dense adhesions. The right tube was much thickened and found to be fractured on the lower surface into the broad ligament or pelvic cavity surrounded by organized lymph, as shown in photograph. Upon freeing the adhesions a large cavity was opened into, the site of the hematoma, which two weeks before had been opened. This cavity was lined by a gray necrotic surface yielding a putrid odor. The uterus was completely removed and the pelvic cavity wiped as clean of debris as possible. Iodoform gauze was packed in each groin over the site of either tube or broad ligament and passed down through the opening left from removal of .the cervix. The patient, it must be borne in mind, had been losing blood for some time and, although fat, was clearly anemic and therefore suffered considerably from shock. It seemed that she suffered more than the circumstances warranted, as she lost no blood from the operation; she did, however, lose some from the cleaning out of the cul-de-sac prior to opening of the abdomen. From first to finish she was under the anesthetic nearly two hours. At the conclusion of the operation she was pulseless, and a hypodermic of adrenalin, atropine and morphine was administered, followed after she was returned to bed, by an intravenous transfusion of three pints of normal salt solution. At 3 p.m. temperature 101 2-5 deg., pulse 120. Adrenalin continued at intervals with strychnia; nutritive enemas were used for several days, as the stomach did not seem disposed to accept nourishment. Physostigma began on second day and continued for some days with apparent benefit in causing an increased peristalsis and escape of gas. Second day salines were administered freely with negative results. Abdomen distended, vomiting, temperature 103 3-5 deg., pulse 144; washed out the stomach with tube, and gave nothing by the mouth. Packed abdomen in ice. Patient from the first had been in exaggerated Fowler position. Gave hypodermically hyoscin, codeine and strychnia. Pulse came down to

120, temperature 102 deg., gradual improvement, though ice pack and treatment outlined was continued for one week. Nourished by enemas. Vaginal gauze was removed for first time on August 18th, four days after the operation. Insufficient drainage in view of the extensive area and material to drain was afforded by the gauze and as a result we had retention and weeping through the lower angle of wound, necessitating the opening of the wound and packing. Tubular drainage should have been employed in conjunction with the gauze. Thorough drainage and irrigation was then practised but found unnecessary.

In about two weeks granulations sprung up and secondary sutures were introduced with perfect results. Patient, after the first ten days, made an uninterrupted and perfect recovery, walking about in two days less than four weeks, and going home in five weeks from the day on which she came to the hospital. The results to those of us who have been intimately associated in the case, seem little short of marvellous, much more so than seems possible to one listening only to the story. So satisfactory has the treatment seemed in this case that I have chosen to enter quite extensively into detail.

While the features of treatment possess principles of interest and might admit of special observation, it is not that feature which I think this case most emphatically displays. We have in the history circumstances which suggest, at least now, very strongly ectopic gestation and yet we can see how easily they might be mistaken. The first question we ask is, what was the nature of her attack last January 31st? Was there a rupture with extrusion of the embryo then, with subsequent hemorrhages from time to time? Her recurring menstrual period and the high temperature at the time would seem to be against such a theory, and yet, I am disposed to think that such was the case. However, of that point we have no way in which to prove or disprove it. High temperature, though not common to these cases, may exist at the time and prior to rupture.

Passing then to the later manifestations with a swelling in the cul-de-sac and to the right, believing possibly that we had a broad ligament pregnancy there, we would ask, is the vaginal incision and drainage the choice of operation? It is true we have most excellent authority advising it, but from my personal experience I am convinced that though the hematoma may be removed quite perfectly in a certain per cent. of cases, even then we have left a fractured tube which may leak more blood, as I have several times seen, or if not, it is left in an imperfect condition, or at least in a condition which we cannot fully appreciate,

through the vagina. This case then, with several others I have in mind, would teach me the best procedure is to go directly through the abdomen, remove damaged structure, clean properly, and get a more perfect recovery.

My reasons for believing that the primary rupture occurred on January 31st are that we have not subsequent history indicating a rupture, at least far enough removed from the time of the operation to give the necrotic and well-organized appearance found in the hematoma site and, moreover, she complained constantly of tenderness in that side. The appendix was found to be normal. The flatulence and intestinal irritation were probably due to the pressure of the hematoma upon the intestinal tract.

The menstruation which appeared to return did so with much physical disturbance and irregularity in time and quantity.

Although there was an apparent or possibly a true menstrual return after the attack in January, still I feel that we had a ruptured tube which may possibly have sustained a second pregnancy and a renewed escape of blood. Certainly the history does not show usual paroxysm of pain of later date than January, when she is said to have had severe lancinating pain coming on during sleep. That we had the rupture at some time is clearly shown in the specimen and the resulting hematoma, and one of some standing, more than a few days, as evidenced by its organized periphery.

I am fully persuaded, that it is possible for such an occurrence even as long as this seems to have been, say seven months. The only history of pain we had since January was on July 24th or 25th, only one week prior to the first operation done by Dr. Jackson.

We also note that the swelling had been observed for at least twelve days prior to this time, that she had been curetted for a supposed abortion on July 19th. Had the rupture with the formation of the hematoma occurred as late as July 24th or July 19th, the clot and debris found in the broad ligament would have left only a roughened surface from the agglutination, while the facts are, we had a well organized cavity in which rested the hematoma.

Had a subsequent rupture taken place as the result of necrosis as it must have been, not to have been attended with more pain, then instead of a hematoma pure and simple we should have had an abscess. As it was, I am told that besides the organized blood there was quite a quantity of free blood when the vaginal incision was made.

The embryo was not found, quite likely having been digested or absorbed, as often happens in old cases. The case has been pregnant with features of interest to me, whether pregnant in the tube last January, or since, or both.

A Case of Acute Leukemia, with Remarks on its Clinical Features and Diagnosis. W. Mitchell Stevens, M.D. (Lond.), M.R.C.P. (Lond.), Fellow of University College, London; Assistant Physician and Pathologist to the Cardiff Infirmary, in *The Lancet.*

Cases of acute leukemia which are usually of the lymphatic type are especially prone to occur in young subjects and they are of much clinical interest as the difficulties in diagnosis may be very great. The case which I am about to record occurred some months ago in the practice of my friend, Mr. F. Temple Morris, to whose kindness I am indebted for seeing it.

The patient, a boy, aged seventeen years, complained of general weakness, slight headache, loss of appetite and painful priapism. The family history was good. The lad himself had enjoyed excellent health until his present illness which commenced one week before sending for his medical attendant with the above-mentioned symptoms. Six months previously the patient had fractured his thigh but he had rapidly recovered from this accident. When first seen on the eighth day of his illness he showed marked pallor and weakness; the temperature was 102 deg. F., the pulse was 84, and the respirations were 24, and a careful physical examination failed to discover anything except very marked and continuous priapism. On the tenth day of illness the blood was tested for Widal's reaction with a negative result. On the thirteenth day of illness I saw the patient in consultation with Mr. Temple Morris and his condition was as follows. He was dull, apathetic, and irritable and complained of headache, weakness, loss of appetite, and great pain in the penis, with difficulty in passing his urine. He was pale, prostrated and wasted. His temperature was continuously raised and varied irregularly between 100 deg. and 103 deg., the pulse was 98 and regular though weak, and the respirations were 26. The skin was dry and sweatings were absent and a careful inspection showed a few small hemorrhagic spots on both flanks. There was no glandular enlargement. The appetite was very poor but there were no gastro-intestinal symptoms and the bowels were regular and the stools were normal.

The tongue was clean though dry, the gums were normal, there was no abdominal distension or tenderness, the liver was not palpable, but the spleen was slightly enlarged but not tender. The heart and lungs were normal, as was the urine. The penis showed marked priaprism, which condition was continuous and painful. A blood examination showed red corpuscles 1,620,000 per cubic millimetre and leucocytes 920,000 per cubic millimetre and it was found that the excess of leucocytes was due entirely to the large lymphocytes. On the twelfth day it was found that the spleen was still further increased in size and distinct enlargement of the glands in both axillæ and in both groins was felt. The patient sank rapidly and died nineteen days from the commencement of the illness.

The following points are, I think, worthy of note: 1. The duration of the illness. The entire illness lasted less than three weeks. 2. The general symptoms. The mode of onset and the general symptoms (headache, malaise, pallor, and continued fever) suggested the probability of typhoid fever and the possibility of tuberculosis or of malignant endocarditis or some "septicemic" condition. Typhoid fever, however, was excluded by the absence of any other symptoms or signs of the disease, including Widal's reaction, and, moreover, the course of the pyrexia and the presence of priapism militated against that disease. Tuberculosis and malignant endocarditis were excluded by the history and by a thorough examination. 3. Splenic enlargement. This was not noticed until the thirteenth day of the illness. The spleen was only slightly enlarged and it was very firm and not tender. The splenic enlargement, associated with pallor and with purpuric spots on the flanks, suggested some diseased blood condition. It is to be remembered, however, that in cases of lymphatic leukemia the spleen is not always obviously enlarged. 4. Glandular enlargement. Enlargement of the lymphatic glands did not make its appearance until after the thirteenth day, by which time the diagnosis had been made by means of a blood examination. It may be noted that the glandular enlargement progressed rapidly in the last few days of life. 5. Blood examination. This showed conclusively that the case was one of acute lymphatic leukemia. An interesting point in this connection is the enormous number of lymphocytes present. 6. Priapism. During the whole of the time that this patient was under observation there was marked and continuous priapism and this condition gave rise to much distress. In conclusion, one may say that a case like this shows the very great clinical importance of a blood examination in

doubtful cases, and, indeed, in this instance it was thus possible to diagnose the presence of lymphatic leukemia before any glandular enlargement was observable.

Calomel as a Poison, with an Illustrative Case. T. L. BUNTING, M.D. (EDIN.), Scotswood, Newcastle-on-Tyne, in *The Lancet*, Nov. 26th, 1904.

Calomel is very inconstant in its action as a poison. Guy says that six grains have proved fatal, while an ounce has been taken with impunity. Rungberg records* a case in which three injections of one and a half grains each given within one month proved fatal, and he mentions other similar fatal cases after subcutaneous injections of small doses. The general assumption seems to be that calomel itself produces the symptoms of acute mercurial poisoning. But this is contraindicated by its insolubility, by the fact that it is not a mechanical irritant, by the fact that very large doses have been taken with impunity, and by the great variations in the fatal dose. This difficulty is met by the suggestion, which does not commend itself to Guy, that calomel acts as a poison only by its partial conversion into perchloride of mercury by the free hydrochloric acid of the stomach. On this supposition the very small fatal doses could be explained on the theory of an over acid stomach converting the calomel to perchloride more rapidly than usual, though it is more likely that an impurity (probably the perchloride) was originally present. It is certain that the action of calomel in medicinal doses is by no means always proportionate to the amount given, the purgation produced by one grain being often equal to that produced by five grains or more in the same individual. On the theory that it acts only by conversion into perchloride this is understood on remembering that, as soon as sufficient conversion has taken place, purgation will be brought on and the remainder of the calomel will be expelled unchanged. Calomel injected subcutaneously would in the same way be converted to perchloride by the chlorides of the blood. But in this case the action of a small quantity could not cause expulsion of the remainder. Hence, the fatal cases from small subcutaneous doses. If this be true, large doses of calomel should be borne with impunity by individuals with healthy gastro-intestinal tracts.

*Deutsche Medicinische Wochenschrift, No. 1, 1889.

That this is actually so is proved by a series of cases reported by Dr. Strong.* He treated lobar pneumonia by large doses of calomel. In most cases he gave 20 grains every three hours for twenty-four hours. In one case, that of a woman, he gave an initial dose of 60 grains, followed by 30 grains every three hours, making 360 grains altogether. In none of these cases was there more than moderate catharsis and there was no ptyalism. Dr. A. W. Messer informs me that he has given similar doses with the same result, and repeated doses of 20 grains have also been given with apparent advantage in cholera. A recent case of my own also illustrates the comparative harmlessness of calomel.

A boy, aged three and a half years, obtained possession of a bottle of 120 cachous, each of which contained one grain of calomel, and ate 110 of them. He came under treatment within about twenty minutes. This consisted first of a dose of eight grains of sulphate of zinc. This did not produce emesis, and was quickly followed by apomorphine, one-fortieth of a grain hypodermically, which produced free vomiting. The stomach was then washed out through an ordinary stomach-tube, bringing away more of the disintegrated pink cachous. A solution of bicarbonate of sodium was used in washing in order to neutralise the free hydrochloric acid and so prevent conversion into perchloride. After the washing five ounces of milk were poured down the tube and left in the stomach. The patient immediately fell asleep. Half an hour later he vomited again and then slept undisturbed for nine hours. There was no further vomiting. The first motion of the bowels did not take place until twelve hours after the calomel was taken; it was copious and soft but not liquid. A second motion, which consisted entirely of an almost gelatinous green mucus, occurred four hours later. After that the bowels were moved only normally. The patient never at any time showed any ill effects or any other symptoms than those recorded. Other cachous previously taken from the same bottle had produced their normal therapeutic effect, so there is no reason to doubt their reputed strength.

The absence of ill effects in this case may be largely due to the prompt energetic treatment, so that it alone proves nothing. But as at least half an hour elapsed between ingestion and the first emesis there had been plenty of time for absorption with so large a quantity present, and, further, as washing never absolutely clears the stomach some must have been left. It may

*_New York Medical Record_, March 16th, 1889.

therefore be said that this case, together with those mentioned above, tends to show that pure calomel possesses but slight toxic effects and that considerable overdoses may be given over a limited time without fear of either acute or chronic mercurial poisoning. A subsidiary point of interest is the early age at which a full-sized stomach-tube was used. There was no difficulty of passing it.

Tetany and Laryngismus Stridulus Accompanying Malnutrition in an Infant. C. C. BENEDICT, M.D., Menlo, Iowa., in the *Journal of the American Medical Association.*

Rarity of Cases.—The relative infrequency of tetany in infants has prompted me to report this case. That it is rare in this country is shown by the report of Griffith,* who was able in 1895 to collect but fifty cases, thirty-eight of which were in children. Sanger Brown† was able to find but one hundred cases in this country up to 1898. He does not state the age at which it was found to occur most frequently.

A careful search of available literature fails to reveal a report of any cases of the disease occurring in infancy, which hardly corresponds with the observation of Holt. It is conceded that the disease is often accompanied by laryngismus stridulus, and usually accompanying rachitis or marasmus. In the following case there was a condition of marked malnutrition of a few weeks' duration only, and only a very few symptoms of rachitis were to be seen before the final termination.

Patient.—J. C. G., male, born May 6th, 1904, weight at birth 7 1-2 pounds.

Family History.—Both parents are apparently in good health. The patient was their fourth child. One child died of scarlet fever some few months ago. The other two children, a boy of about seven and a girl of about nine, are both bright and healthy.

Previous History.—When this child was born it was tongue-tied, which was clipped about six weeks later. Mother states that she has always had plenty of milk in both breasts to nourish the other children well, but at the lactation just previous to this she thought the supply in the left side was not so good. The

*Holt's "Infancy and Childhood."

†Sanger Brown: *Med. News*, July 5th, 1904.

milk from left breast at present is poor in quality, showing low percentage of fat, and on standing, separates into opaque and transparent portions. From June 17th, when the frenum was clipped, until September 10th, the child did not come under my observation.

Clinical Course.—During my absence from home for a few days early in September, a fellow practitioner was called in on account of several superficial ulcerations presenting on the scalp and behind each ear which were slow in healing. There were also several small sores around the edges and end of the tongue, and on the corresponding buccal and labial surfaces. On September 10th I was hurriedly called on account of a spasm the child had just passed through. I found the child lying quietly in the mother's lap, uttering a low feeble whine, mouth wide open, eyes partly closed, skin bluish, features pinched and peaked, lying apparently oblivious to all surroundings and offering no resistance to manipulations. Temperature 101.4 (axilla); pulse about 125 and weak. The mother, in describing the spasm, said that the child's face became blue, the head was thrown back, the limbs became stiff and rigid. Respiration ceased entirely for a brief time, then began again, and the normal color gradually returned to the skin.

The mother stated that four or five weeks ago the child weighed twelve pounds; present weight nine pounds. He takes the nipple vigorously, but after three or four efforts drops it and begins to fret and cry; on changing to the other breast he nurses all right and seems to be satisfied. Suspecting poor quality and deficient quantity of milk to be largely the cause of the present trouble, an immediate change was made to a 5 per cent. preparation of cow's milk. The sores on the tongue and lips prevented the use of the rubber nipple, so we made use of an ordinary medicine dropper until he could grasp the nipple. The bowels were moving two or three times a day, but contained particles of undigested food. An examination of the lungs was negative.

September 11.—Temperature 101.4; pulse fair; slept quite well; takes bottle some; lungs negative; no distension of abdomen.

September 13.—Temperature 100.3; pulse strong; gave strychnine in 1-300 grains every four hours since first visit. Bowels moved three times. Child seems more lively, and takes more notice of things going on about him; cry is stronger, urine scant and of reddish color. Glottic spasms have been occurring each day at intervals of from forty minutes to three hours.

September 15th.—Temperature 100; some curds passing in stools; some distension of abdomen; lungs negative.

September 19th.—Temperature 100.2. Until this morning the child was doing nicely, except for some tympanites, which was relieved by enemata. This morning the mother noticed slight twitching of fingers and forearms on left side. (He had all the time held both thumbs flexed into the palms and fingers clasped over them, so that where the index fingers crossed the thumbs there appeared a small ulceration. We had previously secured the thumbs outside the fingers to allow these to heal.) When I arrived at the house both forearms were involved in the muscular spasm, and the toes of both feet were markedly flexed. The lungs were negative, and the glottic spasms were less frequent and milder. Color of skin was even better than when last seen.

September 20th.—Temperature 100. Tremor is about the same, but has not had any glottic spasms since night before. Present weight 9 1-2, showing a gain of a half pound. Has had no general convulsion.

September 22nd.—Temperature 101. Tremor was less yesterday, but has increased to-day; some sore throat; a fine, elevated, glistening eruption has appeared over upper part of chest, shoulders and neck. Skin is quite red with a few minute pustules. Small ulceration appeared on umbilicus. Sweats a great deal. Bowels moved three times.

September 24th.—Temperature 101. Tremor about the same; color of skin better; eruptions disappeared; umbilicus better; profuse sweating, especially of head. Some abdominal distension: ear and scalp wounds healing nicely and urine is now quite clear. Sleeps well; no undigested food in stools. Has had slight cough for past thirty-six hours; lungs negative.

September 27th.—Temperature 104. Eruption has reappeared on chest and neck; cough has disappeared; some mucus in throat; bowel movements from two to four a day; quite marked abdominal distension; respiration somewhat rapid; a few fine subcrepitant rales found in upper lobe of right lung posteriorly; left side negative; tremor present as before.

September 27th.—Temperature 107.4 (axillary); marked dyspnea; pulse rapid and weak; tremor has disappeared; skin dark; coarse rales over all portions of both lungs; has occasional glottic spasm; liver enlarged downward three inches. After use of cold towels for from fifteen to twenty minutes, temperature was 103; cold was discontinued, and an hour later it had dropped

to 101. When temperature fell, the tremor reappeared, in hands first and finally in feet.

September 28; 9.00 a.m. Temperature 101; has risen to 103 once during night; no more glottic spasm; respiration is rapid and very difficult; condition of lungs unchanged. Tremor of upper extremities as before, and mild in toes and plantar muscles.

The child died at noon, the tremor subsiding only immediately before death.

Treatment.—The treatment of this case was, from the beginning, an effort to supply a better quality of food. Working on the theory that the disease is of gastrointestinal origin, the aim was to rid the intestinal canal of its toxin-producing material by administering at the beginning a full dose of calomel, and each subsequent day three or four one-tenth grain tablets, so as to produce from two to four free evacuations each day. To supply the lack in food a good quality of cow's milk was given at alternate feedings. Pure cream and saccharum lactis were added as needed.

Comments.—The theory of auto-intoxication is advanced as the determining cause of tetany, as given by Strong, Loebl and Moynihan-Peters of Berlin, in an excellent discussion of the pathologic anatomy, as a result of a histologic examination of eight cases, says that it is an organic affection, the lesion consisting of an interstitial neuritis or ganglitis, the process involving the nerve roots, innervating the parts that are the seat of the muscular spasms. This over-excitability of the motor nerves is the result of mechanical compression of the motor fibres in the root regions, by the products of the inflammation.

That tetany in infants is nearly always preceded by some disorder of nutrition is very good evidence in favor of the auto-intoxication theory. Rachitis is a common forerunner of the disease, and while the case just detailed presents a few of its symptoms, it is hardly enough to say that, had the child lived six months longer he would have developed the disease in a well-marked form. It might be added that antipyrin and bromid of sodium were both used in this case, with apparently little effect. I would also call attention to the fact brought out that the general condition of the child was improving up to the development of the lung complication, as evidenced by the gradual healing of the ulcerations about the head.

Therapeutics.

The Management of Hernia in Infancy and Childhood:

In the *Journal of the American Medical Association,* January 14th, 1905, Dr. William B. Coley, of New York, tells of the management of hernia in infancy and childhood. In Dr. Coley's opinion truss treatment should always be the method of choice in children under the age of four years. He cites these objections to this general rule: 1. If there is a history of strangulation that has become reduced by taxis, I believe that an operation is indicated, no matter how young the child. 2. In cases in which, despite carefully directed truss treatment, the hernia has become irreducible, or reducible with difficulty, I think early operation should be advised. 3. In cases in which the rupture cannot be controlled by a truss and, as a consequence, is gradually increasing in size. 4. In all cases of femoral hernia, the reason for prompt operation in this class being that a cure by persistent truss treatment is practically unknown at any age. 5. Immediate operation is indicated in all cases of hernia associated with reducible hydrocele, or fluid in the hernial sac, inasmuch as it is impossible to control the rupture by means of a truss, and there is, hence, nothing to be gained by waiting. Dr. Coley considers the "opposite-side" or "cross-body" truss the best. As to duration of treatment if a child has attained the age of four years, and the rupture has not been cured, then an operation should be performed.

Bread Substitutes for Diabetic Patients:

R. T. Williamson, M.D., in the *Medical Chronicle* for January, says in deciding whether a diabetic bread-substitute should be employed or not, it is necessary to determine: 1st. Whether it is practically free from starch and sugar. 2nd. Whether the taste is agreeable to the patient. 3rd. Whether the cost of the preparation is too great for the patient's means or not. 4th. In the case of diabetic biscuits sold by various firms, whether they can be broken up by the patient's teeth. The following are the most useful of these bread-substitutes: Prepared from vegetable albumens—Roborat bread, Aleuronat cakes and gluten bread. Prepared from nuts—Almond cakes and cocoanut cakes. Pre-

pared from milk albumens—Plasmon powder and biscuits, protene bread and biscuits, casoid bread and biscuits (kalari and pro-lacto biscuits).

Hemorrhoids:

Samuel G. Gant, M.D., New York, in *N. Y. M. J.* and *P. M. J.*, says that he has operated upon more than two hundred and fifty cases of hemorrhoids, under sterile water anesthesia with the most gratifying results; one hundred and eighty-six of these were included in a collection of three hundred and twenty cases of various rectal operations performed under this method of anesthesia. This group of operations embraced every variety of pile tumor, under all conditions ordinarily encountered, and effective radical treatment was rendered by this method, so simple and easy to accomplish in the office, patient's home, or dispensary, without resorting to general anesthesia, and with so little danger and inconvenience to the patient, that in the writer's opinion it should relegate to oblivion the much vaunted but uncertain and dangerous injection method of treating hemorrhoids which has accomplished little and caused much suffering, but, nevertheless, has enabled the quacks or medical vampires throughout the country to extort enormous sums from this class of sufferers. Anesthesia is produced by injecting sufficient sterile water into the centres of the tumors; then they can be painlessly operated on by the ligature, clamp and cautery, or linear excision methods.

The Treatment of Hydrocele:

Charles Greene Cumston, M.D., Boston, in the *American Journal of Dermatology* thus describes Volkman's operation for the radical cure of hydrocele: Under narcosis the sac of the hydrocele is split open by a free incision extending from the external inguinal ring to the base of the scrotum. The cavity of the tunica vaginalis is thoroughly irrigated with a 3 per cent. carbolic acid solution, and the tunica vaginalis is carefully sutured to the borders of the cutaneous incision. About fifteen to twenty sutures are necessary, and catgut or fine silk may be employed. In applying the dressings they should be put on in such a manner as to compress the scrotum tightly, so that the tunica vaginalis is everywhere in close contact with the parietal vaginalis of the testicle, and the incision is left open. A drainage tube is only necessary in those cases where the vaginalis

forms multiple folds, but when such is the case, Dr. Cumston believes it better to excise as much of the membrane as may be required to avoid this condition of affairs. Recovery follows as a result of the adhesions between the two serous surfaces.

Lobar Pneumonia in Infancy: Dr. John Lovett Morse, Boston, in *American Medicine,* January 28th, 1905, delivers himself as regards the treatment of lobar pneumonia in infancy: The treatment is hygienic and supportive rather than medicinal. The infant should be disturbed as little as possible. It must have the greatest amount of fresh cool air. If possible it should be kept out of doors during the day; next best, close to an open window. Regulate diet to suit weakened digestion; use stimulation only when indicated. When required strychnine is most useful, alcohol next. If fever accompanied with nervous symptoms, cold externally, not coal tar drugs. Use hot applications for pain, bromide and codeia for restlessness.

Prostatic Hypertrophy: The present attitude regarding the treatment of prostatic hypertrophy is dealt with in the *Medical Record,* December 31st, 1904, by Martin W. Ware, M.D., New York. Fifteen years ago the routine treatment was self-catheterization, and when exact anatomical knowledge enlightened surgeons as to the condition present, there was rapidly evolved and developed a well-planned operation by the perineal or suprapubic route. The operation by the perineal route is the elect operation for obvious reasons. In this the pendulum has swung far to the operating side of the question, and it has undoubtedly proven another triumph of modern surgery.

Puerperal Infection: Rudolph Wieser Holmes, M.D., Chicago, in the *Clinical Review,* January, says: "Sera.—Theoretically sera are the only curative measures for puerperal infections; but, unfortunately, practically they are all of small use. For example, streptococcic serum must have been produced from identically the same germs as produced the

infection; further, as the infections are prone to be of a composite form a composite serum must be used, which would be a return to the old 'shot-gun' mixture. The future undoubtedly will furnish us with a reliable preparation of serum for each of the usual germs found in infections of the lying-in period, the use of each being dependent upon the bacteriological findings of the lochia."

Earache: Dr. G. Bjorkman, Milwaukee, prescribes the following for earache (*Merck's Archives*):

℞ Acidi Carbolici ..... ♏xl.
Alcohol ..... ♏xlv.
Glycerini ad ..... ℥i.
M.

Sig: One-half a dropperful warmed, to be instilled into the ear, for adults; less for a child.

Synovitis: Used in acute conditions. This solution may be employed hot, and joint surrounded with hot water bags; or, if more agreeable to patient, may be employed in cold, and joint surrounded with ice-bags. The rubber bandage firmly applied frequently relieves pain and swelling.

℞ Liquoris plumbi subacetatis ..... f ℥ii.
Tinc. opii. ..... f ℥ii.
Aquæ bullientis ..... q.s. ad. f ℥xxxii.
M.

Sig.: Apply upon soft cloths saturated with solution, and place joint at rest.—*The Medical News.*

Carbolic Acid Poisoning: Bufalini recommends Persodine, which is a mixture of sodium and ammonium persulphates, as an antidote in carbolic acid poisoning. *N. Y. M. J.* states that the soluble sulphates are the most efficient antidotes to this poison, but the persulphates are more energetic and more quickly effective.

Operation for Varicocele: Lucien Lofton (*N.Y.M.J.* and *P.M.J.*), finds the ligation method of operating for varicocèle satisfactory. The patient in a semi-recumbent attitude, the surgeon grasps the scrotum with the left hand, the index finger and thumb at the same time separating the vas deferens and spermatic artery, while the pampiniform plexus is brought well up against the anterior and upper walls and held there. A surgeon's ordinary curved needle three inches in length, with double strand of No. 2 fiddle string, is employed, and the point pierced at the seat of election, and the mass fixed. The needle is not allowed to perforate the opposite wall, but is guided around to emerge at original opening. Gradual tightening of strands is advisable unless you are sure you have isolated the vas and artery.

Society Reports--Notes of Interest.

Typhoid Fever and Appendicitis:

At the seventeenth annual meeting of the Southern Surgical and Gynecological Association, Dr. John C. Oliver, of Cincinnati, gave the following conclusions regarding the irregular manifestations of typhoid fever and appendicitis: 1. That typhoid ulcers may appear in the glandular structures of the appendix and give rise to a typhoid appendicitis. 2. That the infiltration of the ileum and cecum in typhoid fever may be so great as to give rise to a distinct tumor mass in the right iliac fossa. 3. That the Widal test is of but little, if any, value in the early diagnosis of the disease present. 4. That the leucocyte count proved in his series of cases to be of value in distinguishing between the two diseases. 5. That an exploratory laparotomy in typhoid fever is not devoid of danger. 6. That abdominal incision is imperative when it becomes necessary to establish the differential diagnosis between a typhoid perforation and fulminant appendicitis. 7. That in the absence of perforation cases of typhoid appendicitis should not be operated on.

The Antitoxin Treatment of Diphtheria:

Dr. B. Franklyn Roger, of the Philadelphia Municipal Hospital, at the regular meeting of the Philadelphia County Medical Society, January 11th, 1905, pleaded for a dose of antitoxin proportionate to the amount and position of the exudate. He recommends large doses in nasal, naso-pharyngeal and laryngeal diphtheria. He strongly advocates using it early, before and without waiting for culture returns. There should also be a more general use of antitoxin as an immunizing agent.

Schafer's Artificial Respiration:

At a recent meeting of the Edinburgh Medico-Chirurgical Society, Professor E. A. Schafer demonstrated his method of artificial respiration. He placed the patient in the prone position and kneeling on one side rhythmically compressed both sides of the chest with each hand. With this method there is no fatigue to the operator and consequently it can be kept up for a long

time. Water and mucus naturally drained away from the patient, and the tongue could have no tendency to fall back into the pharynx.

A New Method of Exploring the Abdomen:

Dr. Alex. Hugh Ferguson, Chicago, told of a new method of exploring the female abdomen at the recent annual meeting of the Western Surgical and Gynecological Association. The hand and entire forearm are passed into the abdomen through the vagina, enough space being secured by cutting through the mucous membrane of the vagina its whole length on each side post-laterally. The mucous membrane cut, the other structure would stretch at once. Dr. Ferguson has employed this method for three years in private practice and at his clinics, passing his hand through to the diaphragm, and thus palpating all the abdominal organs.

Extirpation of Gasserian Ganglion:

Dr. John B. Murphy, of Chicago, stated before the annual meeting of the Western Surgical and Gynecological Society, that he had operated on twelve cases, with four deaths, extirpating the gasserian ganglion for facial neuralgia. There has been no recurrence of the neuralgia in any case thus far.

Hard Paraffin in Nose Deformities:

Dr. Walker Downie, of Glasgow, before the recent meeting of the British Medical Association, said that in two and a half years he had operated on one hundred cases of nose deformity, using hard paraffin in the correction of the same. The operation is devoid of danger when properly performed. Where the deformity is of the nature of a sinking-in, and the sunken area healthy, the shape of the nose can in all cases be improved.

Stipticin in Uterine Hemorrhage:

Stipticin, introduced by Dr. Martin Freund, is narcotine hydrochlorate obtained from narcotine by oxidation. At the recent annual meeting of the Southern Surgical and Gyne-

cological Association, Dr. H. J. Boldt, of New York, said that he had used stipticin now for seven years in various cases of uterine hemorrhage. Two and one-half to five grains seems to be a large dose, and if three doses are not beneficial it may be discontinued. Dr. Boldt considers it better than any other drug.

Radium in Carcinoma

Before a recent meeting of the Practitioners' Society of New York, Dr. Robert Abbe in reply to Dr. Charles McBurney, said that he had not employed radium in more than half a dozen cases of carcinoma, but in every case some improvement was noticed.

Roentgen Rays and Cancer:

Dr. Charles McBurney said before the Practitioners' Society of New York, that many patients had been treated with the Rœntgen Rays, thus excluding operation, until the disease was too far advanced, where an operation would be beneficial.

Cancer:

Dr. Joseph D. Bryant, New York, recalled before the Practitioners' Society, that clover flowers, turpentine, the introduction of electrically-charged needles into the tumor, condurango, Roentgen ray and radium, have successfully been tried in the treatment of carcinoma, as had the surgeon's knife, and he would reverse all these and use the surgeon's knife first, and then if necessary use one of the above agents in prevention of recurrence.

Chloroform Anesthesia:

Sir Lauder Brunton said before a meeting of the Royal Medical and Chirurgical Society of London, that the success of the anesthetist would depend upon maintaining anesthesia steadily and thoroughly until the operation was over, thus avoiding risk by shock from the operation or shock from too concentrated a vapor to the respiratory passages, and shock, spasm and suffocation from regurgitated food. Position of the patient was also strongly emphasized.

Ulcer of Stomach: At a recent meeting of the Practitioners' Society of New York, Dr. Edward G. Janeway, in discussing problems relating to simple ulcer of the stomach said, that a hemorrhage from the stomach, just as one from the lungs in early phthisis, had the effect of a life-saver, in that it usually awakened the patient to a proper sense of his condition.

Spinal Cocainization: Dr. Robert Jones thinks that English surgeons are too timid in regard to the use of spinal cocainization. At a recent meeting of the Liverpool Institution, Dr. Jones stated his belief that with strict asepsis, there was very slight risk. He says it is of particular advantage where operations are necessary in cases of advanced phthisis, bronchitis, or asthma, in persons fearing general anesthesia, and in shock following severe injuries of the lower limbs.

Errors in Diagnosis: Byrom Bramwell, M.D., before the Manchester Society (*Medical Chronicle*), thus describes diagnosis: It is or ought to be *a logical conclusion based on the facts of the case.*

The object should not be to give a name to the disease, but to determine the exact character and extent of the lesion or lesions.

Grave errors in prognosis may result from a mistaken diagnosis, as for example: Myxedema diagnosed as obesity, or Bright's; acute tuberculosis diagnosed as typhoid fever; acute tuberculous pneumonia diagnosed as acute bronchitis or acute croupous pneumonia; hemoptysis due to mitral stenosis diagnosed as due to phthisis; acute nephritis occurring in the course of cirrhosis of the kidney diagnosed as a primary acute inflammation of the kidney; functional (cyclic) albuminuria diagnosed as Bright's disease; temporary (dietetic, functional and gouty) glycosuria diagnosed as diabetes mellitus; disseminated sclerosis diagnosed as hysteria; alcoholic insanity diagnosed as G. P. I.; tabes with gastric crisis diagnosed as ulceration of the stomach; myasthenia gravis diagnosed as hysteria; Friedreich's ataxia diagnosed as chorea.

Physician's Library.

Blakiston's Quiz-Compends. A Compend of the Diseases of the Eye and Refraction, including Treatment and Surgery. By George M. Gould, A.M., M.D., and Walter L. Pyle, A.M., M.D.

This is the third edition, revised and enlarged, a practical, handy, compend, containing one hundred and nine illustrations, several of which are in colors. It is just the thing for students, and will prove of good value to general practitioners.

Manual of Diseases of Women and Uterine Therapeutics. For Students and Practitioners. By H. MacNaughton-Jones, M.D., M.Ch., Master of Obstetrics (honora causa) Royal University of Ireland, Fellow of the Royal Colleges of Surgeons of Ireland and Edinburgh; formerly University Professor of Midwifery and Diseases of Women and Children in the Queen's University, and Examiner in Midwifery and Diseases of Women and Children in the Royal University of Ireland; ex-President of the British Gynecological Society; Corresponding Member of the Gynecological Society of Munich. Ninth Edition. University Series. London: Ballière, Tindall and Cox. Canadian agents: J. A. Carveth & Co., Yonge Street.

This, the ninth edition of this work, has been to a great extent rewritten: and there have been added clinical, operative and pathological advances commensurate with the advances of the day. The book is a superior one in many respects. Those chapters dealing with uterine displacements and pessaries, are aptly and superbly illustrated, and, indeed, all the illustrations throughout the book are admirable. There are also chapters worthy of exceptional note, such as those on the female bladder, ureters and rectum, as well as one on gynecological electrotherapeutics. The book will eminently satisfy the wants of students, and prove also of decided value to practitioners.

The Doctor's Recreation Series.—The Doctor's Red Lamp. A Book of Short Stories Concerning the Doctor's Daily Life. Selected by CHARLES WELLS, Moncton. The Saalfield Publishing Co., Akron, Ohio.

The volume of the "Doctor's Recreation Series," Number II., is entitled "The Doctor's Red Lamp." Some of these stories we have found familiar, others new. We are satisfied it will be a work when completed which will appeal to a great many of the profession. We are far too prone as a class to stick too much to the reading of medical literature when we could be broadening and strengthening our views of life with other literature. These volumes are designed for relaxation after work, and we will undoubtedly pass many an hour in happy perusal of them. Heavy reading is not always desirable; light must sometimes be indulged in. No one can afford to miss or remain unfamiliar with the short stories, squibs, etc., which have been written about the profession, and the Saalfield Publishing Co. are to be congratulated upon putting out this collection.

A Text-Book of Legal Medicine. By FRANK WINTHROP DRAPER, A.M., M.D., Professor of Legal Medicine in Harvard University; Medical Examiner for the County of Suffolk, Massachusetts. Octavo volume of 573 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1905. Canadian agents, J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. Cloth, $4.00 net.

The subject of Legal Medicine is one of great importance, especially to the general practitioner, for it is to him that calls to attend cases which may prove to be medico-legal in character most frequently come. Dr. Draper has written his work both for the general practitioner and for the medical student. He has not only cited illustrative cases from standard treatises on forensic medicine, but these he has supplemented with details from his own exceptionally full experience—an experience gained during his service as Medical Examiner for the City of Boston for the past twenty-six years. During this time his investigations have comprised nearly eight thousand deaths under a suspicion of violence. The author's long teaching career has enabled him to

state facts and detail procedures with a clearness rarely met in a work on Legal Medicine. Withal, we think Dr. Draper's book is unusually satisfactory; it is more—it surpasses our expectations.

Progressive Medicine, September and December. 1904.

This quarterly digest of advances, discoveries and improvements in the medical and surgical sciences presents two strong replete volumes for September and December, 1904. The September issue, Vol. III., has for contributors, William Ewart, Wm. S. Gottheil, Richard Norris and Wm. G. Spiller, and the subjects treated of are diseases of the thorax and its viscera, including the heart, lungs and blood vessels; dermatology and syphilis; diseases of the nervous system and obstetrics. Wm. T. Beldfield, Joseph C. Bloodgood, John Rose Bradford, H. R. M. Landis and Steel J. Dutton keep the December, Vol. IV., up to date on diseases of the digestive tract and allied organs; liver, pancreas and peritoneum; anesthetics, fractures, dislocations, amputations, surgery of the extremities, and orthopedics; genito-urinary diseases; diseases of the kidneys; and a practical therapeutical referendum. No one can afford to be without this work, which may be ordered from Lea Brothers & Co., publishers, Philadelphia.

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COMMENT FROM MONTH TO MONTH.

Lieutenant-General Laurie, whom Canadians will remember was at one time a member of the Canadian House of Commons, is now a member of the British House of Commons, and has been prosecuting before that august body, and still desires to do so, an amendment to the Medical Act of 1858, providing the Canadian profession supports him in his endeavors. The object of this amendment is set forth in the following paragraph, taken from the memorandum of the bill: "Surgeons of the highest standing in Canada, and holding commissions from His Majesty in the militia, volunteered for service in South Africa, and a complete field hospital was offered for Canada, and in both cases the War Office refused to accept such service on the ground that it was contrary to the Medical Act of 1858 to permit a surgeon of the Colonial Register and colonially trained to attend professionally to British troops. The object of the amending bill is to

remove this disqualification." General Laurie desired an expression of opinion on the matter from the Canadian Medical Association, but as his communication to that body miscarried somehow, the matter was not dealt with at the last annual meeting in Vancouver. The subject, however, has been placed before the leading local medical societies of Canada; and to our knowledge the St. Francis District Association of the Eastern Townships has been the first to pass a resolution favorable thereto. It is to be hoped that every medical society will despatch a favorable resolution to General Laurie, so that when next he presents the matter before the Imperial House he will have abundance of evidence that the proposed amendment to the British Medical Act meets with the cordial support of the Canadian profession. The Bill of 1904 was backed by the representatives of the General Medical Council, Sir Walter Foster and Sir John Tuke.

Doctors and North-West Autonomy is the heading of a letter recently in the *Globe*, from Dr. W. H. Scott, Toronto. As the Government of the Dominion is about to create two provinces out of the North-West Territories, Dr. Scott is afraid that the two prospective legislatures will immediately, presumably on the advice of the medical practitioners now located in that quarter of our Dominion, pass restrictive legislation precluding any possibility of doctors from any other part of the Dominion coming to practise in that part of Canada, without first undergoing a rigid examination. The writer puts forward the argument that that part of Canada was purchased from the Hudson Bay Company by the then Dominion of Canada, and that it would be unfair to exclude the medical profession which formed a portion of the population of Canada as it then was. No one will now deny that it was both a wise and a good purchase; but it seems to us most unreasonable that the medical profession of the older provinces having laws to govern themselves, should, until such times as Dominion registration becomes law, seek to meddle in any way with medical matters of the two prospective provinces any more than it does now.

From Montreal we have word of what appears to have been a most dastardly sacrilege of the heaven-born rights of the lying-in woman. Two myrmidons of the law, a deputy high constable and his special satellite, armed with a search warrant invaded the wards of the Montreal Maternity Hospital, and in spite of assurances from doctors and nurses that no such female patient as the smaller minion was present to identify was there, they searched in a most unmerciful and cruel manner both the public and private beds, the search ending fruitlessly so far as their particular quarry was concerned, but a search which will be sure to end disastrously for themselves, as the authorities of the Maternity Hospital are after both with a very hot stick. Without knowing anything of the circumstances for which this female was so strenuously sought, her plight may have been such, when she was suspected of having found shelter in the wards of a maternity hospital, that the sleuths of the law might have well let her lie in, even if she were there, which does not seem to be quite established by the search, looking to and taking the bond of the hospital authorities until such proper time as she could appear before a court of law. But the enormity of the outrage seems to us to be that they invaded wards which for the time being were rented from the hospital, transient tenancy it is true, but private, and which certainly ought not to have been entered without special warrants for each private ward so entered. We are inclined to think that the occupants of these selfsame wards could proceed against these men for both house-breaking and trespass. The most strong, virile and slashing editorial condemnatory of the dastardly outrage which appears in the current number of the *Montreal Medical Journal* must be like vitriol to the hearts of these men, who must feel their position now that they have raised such a blizzard of denunciation upon themselves.

People with ordinary commonsense must have a mixed feeling of pity and contempt for those claiming that they believe in what is called "christian science," which has been denominated

most unscientific and most unchristian. It is difficult to understand how in these enlightened days, when the general public is put in possession of so many facts regarding disease, especially of an infectious and contagious nature by the public press of the land, that there are individuals who scout and scoff at both moral and civil law, and who will let their friends, their relatives, their children, yea, even themselves die, totally disregarding, wantonly ignoring even the simplest laws of hygiene. Either these people are ignorant to a degree bordering on barbarism, or they are astute and cunning to a degree bordering on criminality. If of the former class, it is a sad satire on modern civilization and modern educationalistic methods upon which we are so wont to pride ourselves nowadays. If of the latter class, we would conceive it would be the duty of the crown in all cases to investigate and put this matter of treatment of the sick by these people upon a legal basis. If the law is going to permit "christian scientists" to treat people with diphtheria, scarlet fever, etc., are doctors going to be dragged to the Police Court and fined $20 if they fail or have neglected to report a case of either, while the "christian science healer," so-called, is left unmolested? Section 80 of the Ontario Public Health Act reads: "When any *physician* knows that any person whom he is called upon to visit is infected with smallpox, scarlet fever, diphtheria, typhoid fever, or cholera, such *physician* shall, within twenty-four hours, give notice thereof to the Local Board of Health, or Medical Health Officer of the municipality in which such diseased person is. Any *physician* who violates this section of the Public Health Act becomes liable to a penalty of $20." A "christian science healer" does not come under the provisions of this Act, and therefore, he may visit and continue to visit infectious and contagious cases of disease, because the Health Officer or Local Board of Health is not empowered to deal with him or her as the case may be. It would seem advisable, therefore, to have the Public Health Act amended so as to read, "Whenever any physician or 'attendant' knows," etc. And in the case of an "attendant" having failed to report a case of the above diseases as required by law, it would be well were he or she to become liable to a penalty of $200, or

in default thereof imprisonment for one or two years. This would empower the Health Officer to deal with these unchristian and unscientific, these ignorant or these astute people.

The time arrived last month when all should have promptly paid up their annual dues to the Canadian Medical Protective Association. We understand that the Executive of this association has recently appointed throughout Canada in each province a special committee to look after the welfare of the Protective Association. This follows out a suggestion made at the last annual meeting, and it is to be hoped that it will prove a good and workable one. The Canadian Medical Protective Association is an organization of the very first importance to medical practitioners all over Canada, and should have the united and earnest support of the entire profession. Indeed, we doubt that there exists amongst us an organization which can be made of so much use to the medical profession in all Canada as this one: and why should everyone be requested to join every year when they ought to pay up as promptly as they pay for any insurance? We would suggest to the treasurer that a month before each year he simply advise all members that unless their dues be paid within a month that he will consider they mean for him to draw upon them for the amount of their annual dues. This would be on a line with the practice of the Ontario Medical Council, and would be found to be practical as well as profitable.

News Items.

CANADIAN.

In Montreal 634 deaths occurred last year from tuberculosis.

Dr. J. F. W. Ross is spending three months in Southern California.

Dr. G. Stirling Ryerson, Toronto, has gone to Atlantic City.

The Faculty of Medicine of McGill will seek full union with the University.

The British Admiralty has closed the Naval Hospital at Esquimalt, B.C.

Dr. T. G. Roddick, Montreal, is spending a holiday in the Bahama Islands.

Dr. H. B. Cameron, of Atlin, B.C., has returned home after a visit to Honolulu.

There were sixty-two cases of tuberculosis reported in Montreal during January.

Dr. George McDonagh, Toronto, has gone to Southern Italy for three months.

Dr. S. M. Lyon is in Collingwood taking temporary charge of Dr. Arthur's practice.

The counties of Oxford and Perth have endowed beds in the Free Hospital at Muskoka.

There were four hundred cases less of scarlet fever in Ontario in 1904 than in 1903.

Dr. J. M. Lefevre, of Vancouver, was in Toronto recently on his return from England.

The Canadian Nurse is the title of a new publication to be shortly issued from Toronto.

Drs. Herbert Adams and Walter Maybury, Toronto, have returned from a trip to Jamaica.

The total number of deaths reported in Ontario during 1904 were 25,415, as against 25,267 in 1903.

Dr. Fred. J. Brodie, of Forest, has been appointed House Surgeon in the General Hospital, Toronto.

Dr. D. A. Shirres, Montreal, has returned from attending the Pan-American Medical Congress at Panama.

Dr. Smith, of the Lazaretto at Tracadie, N.B., reports that there are fifteen cases of leprosy in that institution.

Dr. A. E. Douglas, Hunter River, P.E.I., has become Speaker of the Prince Edward Island Legislature.

Drs. W. J. O. Malloch and A. C. Hendrick, Toronto, go to England in March.

The medical profession should be well looked after with three medical men in the Cabinet of the Hon. Mr. Whitney.

The death is announced of Dr. James McGregor Stevenson, of Dunfield. He was a gold medallist of McGill University.

Dr. Field, the physician for the T. & N. O. Railway, is about to build a hospital near Swan Lake for the railway employees.

Dr. E. E. Latta, of Colborne, Ont., has been appointed an Associate Coroner for the united counties of Northumberland and Durham.

Dr. E. P. Lachapelle, Montreal, has returned to that city from attending the annual meeting of the American Public Health Association at Havana.

Dr. J. H. Carrique, who practised in Collingwood, and who went to Sarnia a few years ago, has made another move, this time coming to Toronto.

Dr. Menzies, formerly of Portland, late of Roseneath, Ont., has decided to move to Delta to make it his home and to locate there for the future.

Dr. R. J. A. McComb, of Trenton, is now in Toronto. The doctor has the honor of being appointed House Surgeon in the General Hospital, Toronto.

Dr. Clarke, of Toronto, is relieving Dr. Williams, of Bracebridge, who has gone on an extended trip for his health.

Dr. Berwick has returned to Shelburne from Victoria Harbor, where he has been assisting Dr. Douglas McRobbie for some time.

At the Toronto General Hospital 12,984 persons received treatment in 1904. These figures include the cases at the Emergency branch.

Dr. A. J. Richer, Montreal, will remain as hon. secretary of the Montreal League for the Prevention of Tuberculosis, Dr. Hardy acting as secretary.

The Peterboro' Sanitarium Association was formed on the 9th of February, having in view the erection of a sanitarium near that city in the immediate future.

Dr. George Macdonald, Brandon, Man., was elected a vice-president of the American Health Association at its annual meeting held recently in Havana.

There were 739 deaths in St. John, N.B., during 1904 as against 771 for the previous year. There were 258 cases of contagious diseases with eighteen deaths.

Dr. Barrett, of Dawson, is spending some weeks in New York. On his way "out" he spent some time with an old friend, Dr. A. S. Monro, of Vanvouver.

Toronto's vital statistics for January: Diphtheria, 187 cases; scarlet fever, 48; typhoid fever, 14. The births registered in January were 412, and the deaths 333.

Dr. Hea, an old and respected resident of Grand Valley, Ont., was stricken with paralysis a short time ago, and is in a critical condition. He is in his 84th year.

Dr. George Charlton, of Montreal, has been appointed by the Dominion Government to establish a bacteriological and pathological laboratory at Regina, N.W.T.

Fire damaged the Royal Victoria Hospital, Montreal, recently to the extent of $30,000. Lord Strathcona has cabled that he will foot the entire bill for repairs.

The many friends of Dr. J. W. Cook, of Strathroy, will be pleased to hear of his success in graduating for M.B. He will form a partnership with Dr. A. Stewart, Fort William.

Dr. Fred. S. Eaton, a recent graduate of Toronto University, has gone to New York City, where he has received an appointment as House Surgeon for a term of a year and a half.

The Anti-Tuberculosis League of British Columbia, has made overtures to the Admiralty Office to lease the Naval Hospital at Esquimalt for the purposes of a consumption sanitarium.

Dr. N. F. Snider, a leading Conservative of Odessa, Ont., is dead as a result of a runaway accident. He was driving with his wife when his horse threw him out against the ridge pole of a bridge.

Dr. William Oldright, Professor of Hygiene in the Medical Faculty of the University of Toronto, has returned from attending the meeting of the American Health Association at Havana.

Professor J. George Adami has been elected chairman of the Management Committee of the Montreal League for the Prevention of Tuberculosis in succession to Dr. Roddick, resigned.

Dr. J. Brien has returned to his home in Essex, Ont., after spending three weeks in a sanitarium for his health. The doctor is not in as good health as his many friends would like to see him.

Dr. Hanbidge, an old Arran boy who has been practising his profession in Montana, is in Southampton on a brief visit to his brothers in Arran previous to taking a post-graduate course at New York.

The deaths from typhoid fever in Winnipeg, Man., in 1904, numbered 133, out of a total of 1,436 deaths from all causes. It has been estimated that over 2,000 cases were reported in that city last year.

The two practitioners of British Columbia whose names were erased from the register of the College of Physicians and Surgeons have had their names ordered on again by Mr. Justice Morrison, of British Columbia.

Whitby has contributed seventy-five of its inhabitants to swell Chicago's population. Among them are Archbishop Quigley, Dr. Sanger Brown and five other doctors, three lawyers and a professor at the University of Chicago.

Dr. Harry W. Spence died recently in Toronto. He was a graduate of 1900 of the Medical Faculty of the University of Toronto, and during the South African War was attached to a British regiment in a professional capacity.

Dr. Charles O'Reilly has been superintendent of the Toronto General Hospital since 1876. During that time 220 house surgeons have been trained in the institution and the cases treated in the wards have grown from 972 in 1876 to 3,811 in 1904.

Physicians are said to be scarce in Newfoundland, especially on the west coast line; and the Government of the Island is appointing physicians to magistracies at salaries of $500 per annum in order to induce physicians to locate in these outlying districts.

Congratulations are in order to the Hon. Dr. R. A. Pyne, who has become the Minister of Education in the Whitney Government. For many years Dr. Pyne has been the popular and efficient Registrar of the Ontario College of Physicians and Surgeons.

An important health conference was held in Vancouver on the 3rd of February, which was attended by the Provincial Health Officer, Dr. Fagan. It is likely that the outcome of this conference will be the establishment of a Board of Health composed of medical men.

The St. Francis District Medical Association of the Eastern Townships, Quebec, has approved by special resolution of the General Laurie Amendment to the British Medical Act of 1858, which seeks to remove the disabilities preventing colonials from serving in the British army or navy.

The annual banquet of the *Canadian Journal of Medicine and Surgery* was held in the King Edward Hotel on the evening of January 4th, and proved a most enjoyable reunion of the staff and a few invited guests. Our contemporaries, Messrs. Drs. Cassidy and Young, proved themselves admirable hosts.

The death is announced at the Royal Victoria Jubilee Hospital, Victoria, B.C., of Dr. William Grant Mitchell at the age of thirty-six years. The late Dr. Mitchell was largely interested in mines in the province of British Columbia, and was at one time a star football player on the Guy's Hospital team.

Dr. English, of the London, Ont., Board of Health, waited on the Ontario Board of Health at their recent meeting in Toronto, and asked for the establishment of a laboratory in connection with the Western University in that city.

Dr. Breffney O'Reilly, only son of Dr. Charles O'Reilly, medical superintendent of the Toronto General Hospital, has gone to Baltimore on the special invitation of Dr. Osler to attend the last series of lectures and clinics of that noted clinician.

Dr. W. T. Williams, of St. Thomas, will leave about the end of the present month for the Bahama Islands, having accepted the position of quarantine officer and medical health officer for the island of Inagua, with headquarters at Matthewtown. Dr. Williams, who is well known in Tillsonburg, having been a former resident, is a graduate of Toronto University, and took a post-graduate course in the Old Country in 1903. He gets his appointment from the British Government. In addition to his other work he will establish a private practice. He is a young man of ability and energy and is sure to be successful in his profession. He will not go alone to Inagua, but will be accompanied by a very popular Tillsonburg young lady, the engagement having been announced of Miss Florence Livingstone, daughter of Mr. W. W. Livingstone, to Dr. Williams. The marriage will take place in a few weeks.

In view of the sympathy expressed at Elmira, Ont., with Mrs. Ullyott in her recent bereavement by the death of her husband, the late Dr. Ullyott, the following reference to the deceased from the Berlin *Telegraph,* will be of interest: "In 1879 Dr. Ullyott removed to Elmira, where at the time of his death, as a result of a attack of pleuro-pneumonia, he had just entered upon his twenty-sixth year of practice, and where he held the esteem of all who knew him. He was a man of refined manners and gentlemanly bearing throughout, was known for his straightforwardness and integrity, had the courage of his convictions and lived a life compatible with the Christianity which he professed as a member of the Methodist church. Dr. Ullyott took a keen interest in educational matters and was a ready speaker, who, when he took the platform, was intently heard, his remarks being marked by a carefulness and conservatism that indicated mature consideration. He enjoyed a remunerative medical practice and will be greatly missed by his patients as well as by his fellow citizens in general.

Office of the Provincial Board of Health.—Deaths for 1904.—The returns for the last month in 1904 are not quite so complete as for the same month in the previous year, and the deaths reported are less by 64. The total number of deaths from all causes as reported by the municipal clerks are 2,077, representing a population of 1,959,643, which gives a death rate of 12.7 per cent. per 1,000, and for the corresponding period of 1903, 2,141 deaths were returned from a population of 2,051,965, which gave a death rate of 12.5 per cent. As may be seen by the comparative table, smallpox, scarlet fever and diphtheria are less prevalent throughout the province, while measles, whooping cough, typhoid and consumption show an upward tendency.

Comparative Table.

Disease.	1904.		1903.	
	Cases.	Deaths.	Cases.	Deaths.
Smallpox	2	0	13	0
Scarlet Fever	168	15	231	20
Diphtheria	437	65	474	72
Measles	125	7	14	1
Whooping Cough	45	4	8	4
Typhoid Fever	68	39	120	24
Consumption	166	159	148	148
	1011	289	1008	269

UNITED STATES.

The American Medical Association is seeking national incorporation.

There are 1,219 women students of medicine in the United States to 25,538 male students.

Dr. L. F. Barker has been appointed an Associate Professor of Medicine in Rush Medical College, Chicago.

Dr. Frank P. Foster has completed his twenty-fifth year as Editor of the *New York Medical Journal.*

Dr. J. H. Musser, Philadelphia, is the chairman of the American Committee of the Fifteenth International Medical Congress which is to be held in Lisbon, April 19th, 1906.

Dr. Thomas H. Manley, New York, died recently in that city of pneumonia. The late Dr. Manley was editor of the section of Surgical Pathology of the *Canadian Journal of Medicine and Surgery*.

Physicians who studied in the Medical Department of the University of Pennsylvania when Dr. Osler was connected with that institution, will present a life-sized portrait of Dr. Osler to the Medical Department of the University.

Dr. Chas. A. L. Reed, of Cincinnati, Ohio, has been appointed by President Roosevelt one of a commission of two members from the United States, to adjust a dispute between the United States and the Government of Panama, regarding certain property rights.

A quack establishment in New York by glaring advertisements in the public press was able to swindle a man out of thousands of dollars, under the pretence of using radium. Now do the self-same newspapers raise their hands in holy horror at the audacity and outrageousness of the swindle.

The Harvard Cancer Commission, it is understood, will report shortly that cancer is neither hereditary nor contagious, and that it is not of parasitic origin. The report will also state that excision is the only cure except in the case of small superficial growths, which may be cured by radiotherapy.

It is said that Dr. W. T. Councilman, who is Professor of Pathology in the Harvard Medical College, disagrees with the findings of the Roswell Park Cancer Commission, which are to the effect that cancer can be cured with a serum. Dr. Councilman thinks that cancer is amenable to surgical procedure alone.

Linseed and linseed meal poultices have been dropped altogether by the army physicians of the United States, it being the opinion of the Surgeon-General's Department that these have no place in modern therapeutics, and that their place can very readily be supplied in a more cleanly manner by hot wet compresses.

Dr. A. J. Ochsner, the eminent Chicago surgeon, received a gold prize for his hospital exhibits at the St. Louis Exposition.

Recently in New York ten well dressed business men were arrested for spitting in the City Hall station of the subway and promptly fined two dollars.

A bill is being prepared for introduction into the Legislature of the State of New York, which will seek to prevent the adulteration of whiskey with wood alcohol.

Exchange for What?—In the "Exchange Bureau" of a well-known New York medical journal, the following extraordinary advertisement appears: "To the Medical Profession—Mohel, or Circumcisor—An expert of forty-five years' experience desires to be engaged by the profession to perform the above operation. Address, Rev." etc.

Here is your Chance.—A society has been formed in New York which will have for its object the securing of the brains of illustrious personages for the purposes of scientific study. The committee to formulate plans is composed of Prof. B. G. Wilder, Dr. E. A. Spitzka, and Dr. Alexander Herdlicker. A proper bequest will be devised whereby persons may during life bequeath their brains to this society.

Wm. Wood & Co., 100 Years Old.—Messrs. William Wood & Company, publishers of New York, having attained the century mark in the publishing business, have issued an interesting brochure giving an account of their history since 1804. This firm is best known to the Canadian medical profession from being the publishers of the *Medical Record*, the *Reference Handbook of the Medical Sciences* and the *Twentieth Century Practice of Medicine*.

BRITISH AND FOREIGN.

A bill is before the New Zealand Legislature which seeks to make compulsory the placing of the names of the ingredients on the labels of all patent medicines, manufactured or imported into that country.

Lord Mountstephen has contributed $1,000,000 to the King's Hospital Fund.

Monument to Virchow.—The city of Berlin, Germany, is going to build a monument to Virchow, and towards this end are offering three prizes towards the plans of same.

At the last meeting of the British Medical Association at Oxford, the advisability of operating in Bright's disease was but briefly alluded to, as a question not yet ripe for discussion.

Mr. Herbert William Allingham by his will bequeathed £2,000, or the residue of his estate if less than that sum, to St. George's Hospital, said sum to be devoted to the founding of a surgical scholarship, to be known as the Herbert Allingham Surgical Scholarship.

Correspondence.

DR. CARVETH AND THE CHRISTIAN SCIENTISTS.—DR. CARVETH'S STATEMENT.

To the Editor of Dominion Medical Monthly:

I had thought my course of twenty years among the medical men of Toronto, in that time trying to work honestly and professionally, would have been sufficient to protect me against charges that have been brought against me in this connection, but some statements lately made concerning my dealings with the Christian Science people require explanation from me.

Some years ago the late John Kent, of McCaul Street, was under my care. After a time he left me to try Christian Science treatment. A day or two before death he became comatose and his friends sent for me and Dr. McPhedran. After his death the case was reported to the Crown officers and an investigation was held. The whole matter came before the late Sir Thomas Galt, who, in dismissing the case, made the statement that a man may have whatever treatment he wishes when sick, and the law cannot interfere with him.

Since that time a large number of my patients have left me to try Christian Science treatment. Some of these and their friends still come to me when sick for medical treatment. My treatment of these patients is the same as given to all my other patients.

In August, 1901, I was called to Markham Street to see the child of Mr. Lewis. When I reached the house I found the boy had been dead a short time. Upon examination, I suspected he died of diphtheria. I took a swab from the throat and, with Dr. Wilson, made a culture which turned out to be diphtheria. Upon finding this out, I reported the case as diphtheria to the Health Officer, and gave a certificate of death from diphtheria, not knowing at that time that I was doing anything but what the law requires.

In February, 1903, I attended Mr. Frazee of Spadina Avenue. Some weeks after this I was called in to attend his child. I found the child suffering from a severe form of scarlet fever, which I reported at once to the Health Officer. The child died in two days and I gave a certificate of death from scarlet fever.

In the early part of January of this year I received a message to attend a young man, named W. H. Goodfellow at 61 1-2 Vanauley Street, the message stating that the young man was very sick, and that his people did not know from what disease he was suffering. I went to the house and found the young man with a pulse of 130, respirations 65, with nostrils dilating, blue-white in color, bathed in perspiration and unconscious, dullness over lower parts of both lungs.

After some hesitation I consented to treat him. I prescribed for him and saw him again next day, when I found him in a dying condition. After leaving the house, his mother-in-law, living near, called me in from the street and explained to me that a medical man (Dr. Riordan) had been in attendance up to within eight days of that time, but that he had received no medical attendance during the last eight days. His diagnosis had been typhoid with lung complication. On the advice of this doctor, his mother-in-law had reported the full circumstances of the case to the Crown Attorney. Knowing that the Crown officers were apprised of the whole matter, I gave a certificate of death from pneumonia, my diagnosis at the time I saw the patient. I gave the certificate, explaining to the patient's brother that, as the case had already been reported to the Crown officers, they would likely investigate and that the responsibility would not be upon me.

GEO. H. CARVETH.

239 College St., Toronto, Feb. 11th, 1905.

MEDICAL APHORISMS, ETC.

To the Editor of DOMINION MEDICAL MONTHLY:

1. "Jucundem nihil est, nisi quod reficit varietas."

2. The first step in wisdom is to be exempt from folly.—*Horace.*

3. The saddest consideration among doctors is that by the time they have accumulated knowledge, verified by experience, and which can be utilized to the greatest advantage of their patients, old age prevents them from the exercise of such wisdom.

4. All physicians are supposed to be very familiar with the code of ethics; yet such is evidently not so. However, it is pleasing to note that the teaching of ethics will soon be established in our universities.

5. "Etiam capillus unus habet umbram suam."

6. "True medicine," says Sydenham, "consists in the discovery of real indications rather than the excogitation of remedies. Those who have neglected these have put arms into the hands of the empiric, and taught him to imitate the physicians."

7. "Inter homines sapiens, inter sapientes medicino" is the demand.

8. To the young doctor who is the possessor of unblemished character; who is honest, just, humble, generous, persevering, and full of ambition in his studies and for his success; who has the personal appearance and manners of the real gentleman; who is clean, both morally and bodily, true success is assured. False success is won by the most cunning and astute knavery.

9. It is better to be ambitious to serve and obtain good results than to seek the crown and applause. To prevent disease, to comfort your patients, to afford them relief is the true ambition.

10. "The human race," says Dr. Holmes, "is divided into two classes; those who go ahead and do something, and those who sit still and inquire."

11. Dr. Austin Flint says: "We should be content with doing nothing when ignorant how to do good."

The Nurse.

12. "Blue-eyed and bright of face, but waning fast into the sere of virginal decay," is Henley's description of the nurse, of whom Shakespeare would have said: "Lady, you are the cruelest she alive if you will lead these graces to the grave and leave the world no copy."

13. I am of the opinion we have in every locality a sufficient number of intelligent widows and aged spinsters who have had sufficient experience, and possess natural qualifications for the position of nurse. They should be the ones whom we had better select for nursing. The trained nurse of the "new woman" order no doubt has her place, but I believe her noblest mission on earth—one for which Providence designed her—is that of motherhood. The nursing of her own babies and her husband, and that before the fountains of her youth are dried up, even desire fail.

14. Dr. Shrady says: "The great doctor is greater than ever, especially in the field of research and discovery; but the average doctor is a smaller personage than he was ever before, and that is why the profession seems to have declined, and lost many of its old time attractions for educated men." Success consists in doing one's best without thought of fame. "'Tis not in mortals to command success, but we'll do more, Sempronius, we'll *deserve* it."

15. Some one has said: "A man may be a *fool* to choose a profession, but he is an *idiot* to give it up." However, it is well to consider that "he who knows not that he knows not is a fool—therefore shun him. He who knows not and knows that he knows not is humble—help him. He who knows and knows that he knows is wise—follow him.

16. Some doctors persist in putting thermometers in the hands of families and patients, because of which they get less practice, and the families, with the aid of a doctor book, treat themselves until the undertaker gets them.

17. Our profession demands of its members brotherly love, peace, co-operation and fidelity, and able advocates for its rights. In the festivities of Piræus in honor of the Thracian Diana, the equestrian celebrants, swinging fire-brands, handed them to one another. (Lampadia exontes allelois diadinsonsin.—Plato.) What is the deduction?

18. No other profession has more binding ties among its members than those which are held as sacred by the true and

faithful disciples of Esculapius. These ties outshine those of all lodges; even those of the brethren of the mystic tie and "hieroglyphic bright," which none but craftsmen ever saw.

19. No man of honor, says *Am. Med.*, advertises himself who only has his abilities, intellect, or skill to sell. Would an engineer come out in a newspaper and by long articles say directly or by implication that he has more knowledge and skill than his professional brethren? Would a lawyer, a preacher, even a newspaper editor? It would be rank egotism and ridiculous. To do so would at once disclass and degrade him in the minds of his colleagues. One's reputation with one's own fellows, and especially with those best fitted to know, is the condition of honor, of self-respect, and even of business success.

20. It is well to be a good listener, but far better to know how to answer cautiously and when to decide promptly; use other men's brains, but exercise not too much servitude, for now and then the world wants the man with a mission to come out from the crowd. However, it is better to remain in the ranks.

21. Physic requires more industry, pains and labor, and, indeed, more learning, a more extended knowledge of the auxiliary sciences to carry it to perfection than any other profession." Such was said more than one hundred years ago.

22. It is said of Goldsmith that when he entered professional work he appeared in "a professional wig, a cane, purple small clothes, and a scarlet *roquelaure* buttoned to the chin." The profession in his time had eminent scholars, and was highly esteemed. Will history repeat itself?

23. Our profession is, and has ever been overcrowded, and as regards money making, many of the mechanical trades surpass it in such respects. About one per cent. of those who are engaged in the profession become moderately rich. It has been estimated by Dr. C. Henri Leonard, of Detroit, that 50,000 M.D.'s of the United States make $1,000 or less, and that 50,000 do not reach a yearly income of more than $500. However, Dr. Taylor says of the 135,000 United States physicians, that 100,000 make yearly $100,000,000, *i.e.*, $1,000 each; that each of 20,000 make $2,000; of 5,000, each is making $5,000; 200 are each realizing $10,000.

24. Very few continue in practice for more than ten years unless aided by some "side line" business; or marry "rich."

25. Being the possessor of knowledge of or familiarity with hydrotherapy, massage and all that anatomy and physiology

teaches you will be enabled to silence the arrogance of osteopathy, Christian Science and other wild delusions which exist and are constantly being formed.

26. "More men of ordinary than extraordinary abilities possess common sense," and without this rare gift of common sense a man, although thoroughly informed in all abstract information, will never become a reliable physician.

27. There are too many in our profession who are mere medicine men, who are egotistical, incompetent, presumptuous, superficial, boastful, unscrupulous, real Shylocks; who neither read nor take medical journals of any merit; whose only book of study is the price list of some pharmacal company and its "journal."

> "Ever thy credit keep—'tis quickly gone;
> Obtained by many actions, lost by one."

28. Self-respect, self-control and self-sacrifice are always to be maintained, as such are the *Trinity* in medicine.

J. S. Sprague.

Stirling, Ont., Feb., 1905.

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Original Articles.

THE SURGICAL TREATMENT OF RENAL TUBERCULOSIS.*

By Howard A. Kelly, M.D., Baltimore.

One of the peculiar and interesting characteristics of the history of the evolution of surgery, is the fact that some one particular subject seems always to be uppermost. The attention of the surgical world is concentrated upon one thing which is discussed, experimented with and analysed, until it is settled upon the best possible basis under the existing guiding principles of surgery, when it is set aside and another subject occupies the field.

The subject of the treatment of tuberculosis of the kidney to-day has, I think, reached that satisfactory stage of its evolution at which we are prepared to write and close the chapter until some great new principle comes to shake and reorganize surgery, such as we have witnessed in the past.

On March 30th, 1893, I performed my first nephro-ureterectomy upon Miss C. R. (No. 1836), at the Johns Hopkins Hospital. She was at that time thirty-one years of age, reduced to a most pitiable condition, a nervous wreck, from the constant distressing calls to urinate every few minutes by day and by

*Read before the Rochester, N.Y., Medical Society.

night, associated with spasms of the bladder and such agonizing pain that she often spent hours in screaming with the pain, to the great distress of doctors and patients. She had a left renal tuberculosis which had run a course of fifteen years' duration with the stress entirely on the sensitive bladder.

In addition to the nephro-ureterectomy the bladder was drained and she made a good recovery, and is to-day in excellent general health, although yet obliged to empty the bladder frequently. A valuable life has been saved and restored to comparative comfort, and there is not the slightest indication of any return of the disease.

Since that time, now nearly twelve years ago, I have had, in conjunction with my former assistants and present associates, Drs. Cullen and Hunner, forty-four cases of renal tuberculosis, and upon these I base the conclusions which are drawn in this communication.

It was Schmidtlein, who in 1863, clearly distinguished between the ascending and descending forms of urinary tuberculosis.

The question thus raised has engaged the attention of clinicians ever since with the result that the number of those who hold to the theory of primary ascending tuberculosis of the urinary tract has steadily decreased, and in women, at least, I believe that it rarely occurs. The close association of the genito-urinary tract in men, and the entire disassociation in women, place this question upon an entirely different footing in the two sexes, so that even if we are justified in speaking of urogenital tuberculosis in the male, such an expression is erroneous in the female, if any direct casual relationship is implied (Amann, Centralbl f. Gyn., 1902, XXVI., 1194).

The view now held that the infection of the kidney is by the arterial system has been abundantly proven by experiment and clinical observation in early cases, as Cohnheim long since said, urogenital tuberculosis is a disease of excretion.

In a woman then, given a case of vesical tuberculosis, we have, with the rarest possible exception, but the one question to consider: the advance of the infection from renal cortex or papilla to pelvis, ureter and bladder. These rare exceptions include in my own experience a single doubtful case of vesical tuberculosis, in which there was no apparent renal involvement and another case in which the vesical involvement was in the right cornu vesicae, where there was a fistula communicating with a tuberculous uterine tube, and yet another (Katzen) in which after removing tuberculous pelvic organs and a large

part of the rectum, the posterior bladder wall became involved and ulcerated.

Given a case of renal tuberculosis, the first question of importance is, what is the prognosis? Can a patient get well by medicinal, dietetic, and hygienic treatment alone?

There can be no doubt that in rare instances (See Guyon, Albarran, Bangs, Veszpreni, and others), there may be a recovery in the sense that the diseased organ has excited such an intense reaction in the surrounding tissues that it has become encapsulated in a sclerotic envelope, while the kidney has become utterly destroyed; such a process is invariably associated with an obliteration of the ureter.

I had a case of this kind many years ago in a young girl who had a fistula in the left groin, supposed to come from a tubercular affection of the vertebra. My renal catheter entered the full distance up into the pelvis of the right kidney, while on the left the catheter was suddenly checked several centimeters short of the distance reached by the right catheter, furthermore, there was no excretion gathered from the left ureter. This showed we had a dead kidney there, and the operation in the left loin revealed an old cheesy focus in the place of the left kidney, communicating with the opening in the groin. Complete recovery followed curettage and drainage.

In spite of such occasional instances of a quasi cure the rule holds good that the disease once settled in the kidney is both progressive and fatal in its termination, whether by extension down into the bladder or by forming sooner or later a focus for the distribution of the disease to other organs by neighboring lymphatics, or by the veins.

If this assertion is true, and my own experience fully corroborates the opinion of many eminent surgeons, then the best treatment for tuberculosis of the kidney is extirpation at the earliest possible date.

The best time to operate in an early case is as soon as the patient is in fair condition, not delaying over a week or two at the most, provided the diagnosis is certain. The best time to operate on an advanced case is within a few days. It is because the disease is progressive under all circumstances that I do not believe in sending away a patient who harbors such a pseudo-malignant affection, to try a climatic cure. I know of no recovery under such a Fabian plan.

The duration of the disease undisturbed may be protracted from sixteen or seventeen (in two of my cases) to twenty years (Frank), showing a remarkable tendency to remain in its

original site, advancing only by slow degrees to the complete destruction of the kidney, but it must be remembered that these are often years of utter hopeless invalidism.

Sooner or later many of these patients show signs of the disease elsewhere, often in the lungs, and with an alarming frequency in the other kidney. This liability of the other kidney caused one eminent authority (Tuffier) to conclude that in these cases, at least, we observed an infection of the ascending variety from the bladder upwards, and this is likely so.

Almost more important than the actual technique of the operation is the preliminary investigation of the case. In the first place, the diagnosis is only sure when tubercle bacilli have been found in urine drawn directly from the bladder. In several instances cases with smegma bacilli in the urine have been sent to me for the purpose of having nephrectomy performed. In one case, the wife of a distinguished colleague, the State Bacteriologist had examined the urine and found tuberculosis, which fully accounted for the pain in her right side, associated with pyuria and hematuria. A most eminent authority in the use of the X-ray had further examined the patient and excluded calculus. When she came to me I was utterly unable to confirm the diagnosis of tuberculosis, and at a later date removed a calculus of the kidney with complete relief of the symptoms. A case in the hands of Dr. Guy L. Hunner, Skene's glands excessively distended with purulent secretions, were found loaded with smegma bacilli. Unfortunately, even catheterization of the bladder does not entirely obviate this source of error. In a case of a little girl, fourteen years of age, in which the whole interior of the bladder was ulcerated, the catheterized specimen of urine showed a few smegma bacilli on two different occasions.

The next step is a careful palpation of the lower end of the ureters through the vagina or through the rectum. In almost every case, especially where the disease is advanced, there is a decided thickening of the ureter, which feels to the palpating finger either like a whip cord or a string of beads being made up of a row of hard nodules. The diseased ureter is often very tender to pressure.

The cystoscopic examination often shows an area of inflammation or ulceration surrounding the ureteral orifice, and extending from this for a variable distance out over the bladder walls. When an ulcer is found in this site it is almost pathognomonic of tuberculosis of the kidney of that side. I would call attention also to one other point characteristic of the ureteral involvement, and that is that the ureteral orifice is often found

retracted to the posterior part of the bladder in the neighborhood of the vesical cornua, and it is often circular or gaping, or appears set in a little pocket ("golf-hole" orifice—Fenwick), and often too, some pus can be seen escaping. The attempt to catheterize the orifice through the open cystoscope may be easy, or in the advanced cases may show a distinct stricture of the ureter due to the infiltration and crowding together of its walls. When once the catheter has passed the obstruction, if any of the secretions are backed up, they may then escape freely by its lumen, or on entering the pelvis of the kidney, a considerable quantity of pus may flow off. The catheter thus introduced may be left *in situ* several hours, if necessary, in order to secure sufficient secretion for examination.

With the demonstration of the infection of the kidney the examination has in reality only entered upon its first stages. It is absolutely essential to determine at the same time the exact condition of the other kidney. This may be done if the bladder is not ulcerated, while the ureteral catheter is collecting urine from the diseased side, by introducing an ordinary catheter into the bladder, which has been previously washed out, and collecting the urine from the bladder during this period, and letting this represent the uncatheterized kidney. If this urine is in all respects normal, it may be accepted as satisfactory. If it is abnormal, the examiner may then proceed to catheterize the opposite kidney. I do not feel the slightest hesitation in doing this through my open cystoscope after cleansing the lumen of the instrument and carefully wiping off the ureteral orifices. This procedure is advocated as free from danger by many eminent surgeons operating through a bladder distended with fluid. If it is safe under these conditions, is it safer through the open air distended bladder.

In doubtful cases, where after days of search in an acid pyuria, no tubercle bacilli have been found, it is of the utmost value to inject two guinea-pigs, one intraperitoneally and the other subcutaneously in the flank with the fresh sediment of urine. It is sometimes well to secure the sediment from a twenty-four hours' specimen to centrifugalize, and to wash it, and then to inject. Casper recommends giving the guinea-pig a dose of tuberculin in advance in order to test whether or not it is tubercular beforehand, thus obviating a serious and manifest source of error.

Cryoscopy, both of blood and urine, are of value as showing the functional value of two kidneys and of each separately.

I have made some use of cryoscopy, but have found our

usual methods of examining the total output of urea, and determining the amount of this which was due to the sound kidney, as perfectly satisfactory for ordinary purposes. It is manifest that if one kidney is almost completely destroyed, as is often the case, that the total output of urea may be credited to the other kidney. Also, if one kidney is only partially involved, and the opposite is a normal kidney, it is also able to sustain life. In cases in which one kidney is extensively involved, and the opposite kidney partially so, a cryoscopic examination of blood, and of the separated urine is of value in determining the feasibility of an operation.

Very often a diseased tubercular kidney can be palpated, and from its size, its tenderness, its rotundity, and a sense of fluctuation, it can readily be determined that this is the diseased organ. Again in a thin patient a kidney approximately normal in size may present areas of lobulations due to the disease. These kidneys are often much harder than normal.

In every case of urinary tuberculosis a careful search must be made for foci of the disease in other parts of the body; not infrequently an unsuspected lung affection will be found. I have had instances, two in which axillary glands were involved and one cervical, and one case with a diseased left knee.

One of three courses is open to the surgeon in the treatment of tuberculosis of the urinary tract, either nephrotomy and evacuation of the abscesses, or excision of the diseased portion of the kidney, or a complete extirpation of the kidney, oftentimes with its ureter and a portion of the bladder.

Nephrotomy is rarely curative, and ought rarely to be relied upon as final. Its greatest value is to drain off the pus from which the patient is absorbing toxins, due to the secondary invasion of the kidney by pyogenic organisms (Albarran). A patient who is too desperately ill for any radical operation, may, after nephrotomy, improve remarkably and then easily stand a nephrectomy. Nephrotomy is also of value where the patient is suffering from advanced disease of the lung or of the other kidney, in which case a further radical operation is out of the question.

Excision of the diseased area, the most attractive operation to the surgical mind, is not often successful. Christian Fenger made a brave effort at this sort of conservatism, and told me all his cases were failures. In a case of Israel's there was a "relapse" after four years with involvement of the ureter and bladder. Morris, however, had a brilliant case in which one kidney had already been removed, and he did a partial nephrec-

tomy, and the patient recovered, and was well, and in active service four years later.

In only three of my cases would it have been possible to have removed all of the disease by a partial operation.

Nephrectomy is then the operation of choice, and my own method of doing it is as follows : The patient is placed upon the Edebohl's cushion, to bring the loin into prominence and an oblique incision is made from the last rib, beginning at the angle formed by the attachment of the quadratus lumborum muscle, and extending obliquely downward and outward for about 10 cm. As soon as the skin is cut, the thin lamella of the latismus dorsi is exposed, and cut through or turned back, or its fibres may be pulled apart in their course. This at once exposes the tendinous area at the upper outer angle of the quadratus, formed by the conjunction and attachment of the oblique muscles. This white inverted triangle, the superior lumbar triangle, I consider to be the important objective point in opening the loin. On reaching this an artery forceps is pushed through the tissues and opened, when upon withdrawing the forceps, the retroperitoneal fat protrudes. The opening is now enlarged and drawn widely apart by inserting the fingers and thumbs first of one, then of both hands. In this way by a blunt dissection the kidney may be exposed, and removed without using a single ligature to any bleeding vessel in the abdominal wall. If it is desirable to make a larger incision, this is done after securing the largest possible opening by a blunt separation of the parts by the fingers as just described, and then separating the external oblique muscle in a direction downwards and forwards in the same manner, and incising the internal oblique. This, which I call a frying-pan opening, gives a maximum space for reaching the retroperitoneal structures. The incision may be enlarged in an upward direction by removing the last rib.

When only the kidney is to be removed, I free the ureter as far down as possible, say about 10 to 12 cm., and crush it with a clamp cautery and divide, or I invert and suture the lower end. After freeing the ureter, the renal vessels are more easily accessible (Hunner) and I prefer to approach them from behind, ligating each separately well away from the kidney. If the kidney is full of pus it is best to evacuate this early, and to deal with the collapsed organ.

In doing a nephro-ureterectomy, I have for years past followed the plan now known as Israel's operation, namely, of detaching the kidney above and the ureter as far as the brim of the pelvis, through an incision such as I have just described,

and then making an extraperitoneal opening into the pelvis through the superior strait and completing the removal of the ureter down to the bladder through this. In this way a wide bridge of intact abdominal wall is left between the two incisions. The loosened kidney and the upper ureter are slipped under this intact bridge, and drawn with the rest of the ureter out of the lower incision and removed.

I will not dwell upon the class of associated vesical tuberculosis, except to say that I have frequently excised areas of the bladder, sometimes as much as one-third of the bladder, in removing the tubercular disease (nephro-ureter-cystectomy).

THE FINSEN LIGHT, ROENTGEN-RAYS, AND HIGH-FREQUENCY CURRENTS IN THE TREATMENT OF SKIN DISEASES.

By Graham Chambers, B.A., M.B., Toronto.

The general application of physical methods in the treatment of skin diseases is no doubt the greatest advance in skin therapeutics in modern times. Formerly we found great difficulty in the treatment of diseases, such as lupus vulgaris, tinea tonsurans, rodent ulcer, erythematous lupus, the lesions of which are deeply situated in the skin, and usually covered with an intact epidermis, impermeable to drugs. Radio therapy has to a great extent overcome this, and we have every reason to hope that with the advancement in our knowledge of the physics the results of treatment of skin diseases by physical methods will be better than at present.

PHOTO THERAPY.

In my work I use the Finsen apparatus, made in Copenhagen. In selecting a lamp for therapeutic work the penetrating power and germicidal action of the radiations are the most important characters to be considered. These are the characters which Finsen kept in view in the construction of his lamp. The form and arrangement of the lenses are such as to concentrate the light to a small area. The lenses are made of rock-crystal, which allows ultra-violet rays to pass through, whereas

glass is an absorbent of these frequencies. The skin is rendered anemic by compressing it with a water-cooling compressor, as tissue rendered anemic is more penetrable to light.

At the Finsen Institute tests were made of several lamps as to their power of penetrating the skin. A sensitized paper was placed behind a varying number of rabbits' ears superimposed. With one rabbit's ear the Finsen light affected the paper in one second, whereas the Bang lamp which has iron electrodes, and emits radiations very rich in ultra-violet frequencies, required one minute. I may say that these laboratory experiments have been borne out by clinical experience, as the Bang lamp and other lamps, rich in ultra-violet rays, but with very little power of penetration, have been found of very little use in treating deeply-seated lesions, such as those of lupus vulgaris.

In my practice I use the Finsen light principally for the treatment of lupus vulgaris. During the last six months I have treated six cases, four of which are apparently cured — two being still under treatment. Three of the four cases which were cured were of the non-ulcerative type of the disease. An improvement was noticed in each case, even after the dermatitis, the result of the first exposure, had subsided. The improvement was gradual, but progressive. The treatments were painless, and the results, considered from a cosmetic point of view, were excellent. One of the patients at present under treatment had, when she came to me, a severe ulcerative lesion, which precludes the use of Finsen lamp. In this case the lesions were given short exposures to X-rays, which appeared to act excellently. As soon as the ulceration had nearly disappeared, the patient was given treatment with Finsen light. I made this change as I believe it is generally held that a permanent cure is more likely to be obtained with Finsen light than with X-ray treatment, although there is no doubt that some forms of lupus, particularly the ulcerative type, react well to Roentgen-rays.

ROENTGEN-RAYS.

My X-ray outfit consists of a fifteen-inch coil, the primary of which is connected to a wall-board, supporting a mercury interrupter, amperemeter, voltmeter, commutator, rheostats, etc. The electric energy is received from the street main (direct current).

In therapeutic work I use hard tubes, placed, except in cases of tinea tonsurans about eight inches from the patient. Exposures vary in length from five to fifteen minutes, and are given two to three times a week.

The field of usefulness of X-rays in dermatology is a large one. I have used it in the treatment of the following skin diseases: Rodent ulcer, epithelioma, sycosis, tinea tonsurans, erythematous lupus, psoriasis, acne vulgaris. In this paper I shall confine my remarks to the first four.

Ulcus Rodens.—The treatment of rodent ulcer by X-rays is as a rule very successful. When the lesion is small, and the hard border of the disease is curetted or removed, a few exposures are sufficient to produce a cure. Large lesions require many exposures. In every case I believe that the removal of the indurated edge naturally shortens the treatment. The healthy skin is protected by placing the tube in a lead glass shield (lupus shield of Dean), to which tubes of various sizes may be attached. In my work the results of treatment of rodent ulcer have been excellent. Small lesions have rapidly yielded to the exposures. In cases with large lesions the improvement has been slow in some and rapid in others. When the lesions have been on the eyelids I have found the glass shield of great aid in applying the rays. By slightly everting the lid the lesion may be treated without exposing the eyeball.

Epithelioma.—In a deeply situated epithelioma X-rays should not be used unless it be applied to the wound or scar after excision. When the lesion is superficial, and appears to be pursuing a sluggish course then I think treatment by X-rays is in some cases indicated. Many patients with epithelioma of the face will not submit to excision of the growth. These cases must be treated either by caustic or by X-rays. When the growth shows very little activity, treatment by X-rays is advisable; but when it appears to be extending rapidly then removal by arsenical pastes, followed in a short time by X-ray exposures, is the correct mode of procedure. In the treatment of epithelioma I have found that the exposures must be considerably longer than those required for rodent ulcer.

Coccogenic Sycosis.—Extensive sycosis is a difficult disease to cure. Epilation is, as a rule necessary, and when the disease involves considerable surface, this is very difficult to perform. In such cases I expose the diseased areas five or six times to X-ray radiations, and at the same time apply a strong antiseptic ointment. The exposures usually increase the inflammation for a time, but this soon subsides, and then, as a rule, the hairs can be removed without discomfort to the patient.

Tinea Tonsurans.—The treatment of this affection by antiseptics is very unsatisfactory. The reason for this is, no doubt, the fact that the fungus is situated deeply in the hair follicle,

and nearly inaccessible to the germicidal action of the medicaments. Vesicants, such as emplastrum cantharides, strong preparations of iodine and of formaldehyde undoubtedly do good, but the treatment is both painful and tedious. The antiseptic treatment would likely be much less tiresome if one could depilate the diseased patches. On account of the brittle condition of the roots of the hairs this can only be effected in one way, and that is by suspending the function of the hair papillæ, and the only known method of producing this result is by submitting the diseased patches to the X-rays. Freund in 1896 suggested this method of epilation in ringworm of the scalp, but the fear of causing burns deterred physicians from putting it in practice. However, recently, as a result of the efforts of Sabourard and his associates, the process of treatment has been perfected until there is very little likelihood of doing harm. Sabourard in his clinic at the Saint Louis Hospital, Paris, causes the hair to fall out after one or two exposures. The hair begins to fall about fifteen days after the treatment, and the defluvium is complete in a few days. During the treatment an ointment, containing an antiseptic, such as iodine, sulphur, salicylic acid, and ammoniated mercury. With this treatment the disease can always be removed in less than three months.

In my work I have only been using X-ray to epilate in ringworm for the last few weeks. For the present I am using short exposures three times a week. The scalp is washed daily, and antiseptic ointment containing salicylic acid, sulphur and ammoniated mercury applied to the patches.

HIGH-FREQUENCY CURRENTS.

In the application of this form of radio therapy to the treatment of skin diseases, I employ an Oudin-Dean resonator, the high potential being received from a fifteen inch coil.

High-frequency currents were introduced into medicine by D'Arsonval, and to him and other French workers we are indebted for the development of this form of radio therapy. D'Arsonval believes it has a marked effect upon metabolism increasing the CO_2 in the case of the human body, from seventeen to thirty-seven litres per hour, and the production of heat from seventy-nine to one hundred and twenty-seven calories per hour. When applied to the skin it produces analgesia or anesthesia. It is also believed by many to diminish the excitability of the nerves and muscles in the neighborhood of the applications. This is no doubt the *rationale* of its action in neuralgia and myalgia.

When the skin is strongly bombarded with sparks hyperemia with less or more edema results. This may last for several days. Prolonged applications cause vesication.

In skin therapeutics high-frequency currents find their most useful applications in the treatment of pruritus and erythematous lupus. In many cases of these diseases its application appears superior to any other form of treatment. I have also found it of considerable value in treatment of warts, telangectases, and alopecia areata.

Erythematous Lupus.—During the last six months I have treated with high-frequency currents, six cases of this disease. Of these four were cured, one has only been a short time under treatment and is improving, whilst one although treated for three months was very little improved, and is at present undergoing light treatment, under which the appearance of the patches is improving. Before the light was applied the diseased patches were exposed several times to the X-rays without any apparent improvement.

The lesions, which appeared to be the most amenable to the radiations of high-frequency currents had considerable induration in their borders and were pursuing a somewhat indolent course. In one case the disease was of twelve years' duration. The lesions were situated on the nose, cheeks and chin, and had indurated borders and central scar-like depressions. High-frequency currents, using Tesla's electrode, were applied to the border once or twice a week. After each application there was considerable reaction, which lasted from two to five days.

As to the manner in which high-frequency currents produce improvement in lesions of erythematous lupus I am unable to definitely state, but I am inclined to take the view that it is some form of stimulation of the diseased patches. However, the stimulation is, no doubt, different from that produced by drugs, as, for example, by the application of carbolic acid.

Pruritus.—Pruritus ani is one of the special indications for the application of high-frequency currents. After each application the skin feels somewhat hot for a short time. Local applications of drugs, etc., as well as constitutional treatment is usually required.

I use high-frequency currents in all cases of pruritus, and consider it a valuable adjunct in the management of these cases.

Warts.—A wart can be removed by sparking it until vesication takes place. The treatment is painful.

Telangectasis.—In the treatment of acquired dilated capillaries, especially the stellate form, I have found scarifications

followed by short application of high-frequency currents, give excellent results.

Alopecia Areata.—I have only treated one case by this method. The patches were sparked for about five minutes twice a week. An antiseptic lotion was also applied to the patches.

The result was excellent, but one cannot say definitely that the application of high-frequency currents was the beneficial agent.

Selected Article.

THE BRADSHAW LECTURE ON THE TREATMENT OF ENTERIC FEVER.*—(*Concluded.*)

By F. Foord Caiger, M.D. (Lond.), F.R.C.P. (Lond.)
Medical Superintendent South-Western Fever Hospital, Stockwell.

Now, if the antiseptic method of treatment is competent to effect all this, it is deserving of no small measure of confidence. Of the various drugs which are known to possess antiseptic properties, calomel is undoubtedly the one which has received the earliest and widest recognition. It has for many years been extensively used by continental physicians, and in this country has received the powerful advocacy, amongst others, of Sir Thomas Watson, Dr. Murchison, and Sir William Broadbent. But its employment, except in minute doses, is practically restricted to the earlier stage of the disease. Liebermeister prescribed it in large doses, that is to say, from eight to ten grains given several times during the first twenty-four hours, provided the case came under treatment before the ninth day of the fever, and he obtained excellent results in a series of two hundred cases so treated, in comparison with another series in which similar conditions existed, except that the patients received no calomel. Liebermeister believed that it exerted a specific influence on the course of the fever. Murchison gave one or two doses of from three to five grains during the first week of the attack, before

*Delivered at the Royal College of Physicians of London on Nov. 15th, 1904.

there was much diarrhea, and believed that as a result the disease ran a milder course and was less protracted. The administration of calomel in this way has been widely practised both in this country and on the continent, and as the result of my own experience of it I am convinced that in suitable cases its effect is exceedingly beneficial.

It is not every case, however, that will derive benefit from the treatment. The fact, I think, is not sufficiently recognized that in exceptional instances a dose of three or four grains of calomel, even when given not later than the end of the first week, will directly induce an intestinal irritation, as evidenced by diarrhea and colic, which tends to persist and may seriously prejudice the ultimate course of the attack. The diarrhea, as, perhaps, is not unnatural, is then apt to be wrongly regarded as a symptom of the fever rather than an effect of the calomel. I have been so impressed with the reality of this risk in several instances that I have given up the routine use of calomel in the early stages of typhoid fever, and now restrict its administration to cases in which there exists some special indication for its employment. It is interesting to note that Sir Thomas Watson, though quite unconscious of their antiseptic properties, was very favorably impressed by the action of the mercurial salts in typhoid fever. He stated that he was constantly struck by the fact that when a soreness of the mouth was observed in his patients they showed marked signs of an improvement, and but rarely died from the disease. It is during the early stage of the attack up to about the middle of the second week that the salts of mercury have usually been employed, and in respect to calomel, its use, except in very small doses, should be practically restricted to this period, since to give it in purgative doses after the establishment of ulceration is rarely admissible.

Of the numerous drugs of the antiseptic class which have been recommended by different physicians for administration at frequent intervals throughout the whole course of the disease, their names are legion. In addition to the perchloride and biniodide of mercury may be mentioned sulphate of quinine, chlorine, sulphurous acid, carbolic acid, boric acid, salicylic acid, and the salicylates of bismuth, sodium and quinine, beta-naphthol, salol, thymol, eucalyptol, turpentine, terebene, camphor, chloroform water and many others. During the course of the last fifteen years I have tried most of these remedies, and in the majority of instances have been disappointed with their action. Several of them I have tried very thoroughly, reverting to their use again and again in consequence of the remarkably favorable

results which have been recorded at one time or another as having attended their employment. I refer more particularly to carbolic acid, salol, and turpentine. As the net result of my experience with these various agents in actual practice, I believe that some of them, when given in frequently repeated doses, are capable of exercising a distinctly favorable influence on the course of the attack, even when their administration is not commenced until after the end of the first week. I do not, however, believe they are competent either to cut short the attack or to lessen to any appreciable degree the risk of hemorrhage, perforation, or relapse, as has been contended by the most ardent advocates of the antiseptic method.

Drugs of the antiseptic class vary very much in their value, some of them apparently being next to useless, and the same drug is not necessarily the most suitable in every case. I am of opinion, after a considerable experience of its use, that the administration of sulphurous acid in from 20 to 30 minim doses every two or three hours is capable of checking fermentative changes in the bowel, with the result that in most cases the tendency to diarrhea and meteorism is lessened, the tongue remaining moist and the stools being rendered less offensive. A good plan is to give the sulphurous acid in an ounce of chloroform water with the addition of 15 minims of syrup of lemons. Administered in this way the taste is not unpleasant and patients take it readily.

I am inclined to regard the oil of turpentine as a remedy of somewhat greater value. It should be given in frequent doses from as early a date as possible. Its value as an intestinal antiseptic and as a diffusible stimulant is highly spoken of by Sir John W. Moore, who is also impressed with its power of relieving respiratory complications; and in that opinion I am disposed to concur. The presence of marked albuminuria or of vesical catarrh, however, should preclude its employment. In the latter case ten grains of urotropine may with advantage be given three times daily, even though the urine be free from typhoid bacilli, but its influence in cystitis associated with the bacillus coli is very slight. I have seen more than one instance in which the continued use of turpentine appeared to be responsible for the development of definite nephritis in a person whose urine previously contained but a slight amount of albumin.

To one of these agents, in my opinion, a somewhat higher value must be ascribed, and that is the combination of quinine and nascent chlorine. In its administration I have followed the

formula advocated by Dr. Burney Yeo, *i.e.*, 40 minims of strong hydrochloric acid are poured on to 30 grains of powdered chlorate of potassium in a 12-ounce bottle, which is filled up gradually with water, the mixture being frequently shaken as the water is being added so as to absorb the gas as it is evolved. To the solution when made 24 grains of sulphate of quinine are added, and of this an ounce is given every two or three hours until convalescence is reached. Care should be taken that an interval elapses between the administration of the medicine and the next feed of milk, which otherwise is liable to undergo some clotting in the stomach as a result of the admixture. Under this treatment the tendency to intestinal fermentation certainly appears to be lessened, and the strength of the circulation is usually well sustained, with corresponding benefit to the general aspect of the case. In some instances, it must be confessed, the result is disappointing, but in cases which come early under treatment, the course of the disease is usually favorable.

During the last two years I have treated a series of cases with the essential oil of cinnamon. This agent was suggested to me by Dr. J. Carne Ross, of Withington, near Manchester, who had been much impressed with the exceptionally favorable course pursued by several attacks of enteric fever which he had treated with it. It was in view of his anxiety that its value should be tested on a more extensive scale that I was induced to give the cinnamon a trial. The results, as far as they go, have certainly been favorable, but the number of cases in which I have tried the drug is not yet sufficiently large to warrant a conclusion of very general application. Up to Sept. 30th last the number of cases treated with the cinnamon has been 147, not counting a few patients in whom its use had to be discontinued after a few doses, in consequence of its having induced vomiting. Of these 147 cases 14 died, representing a mortality of 9.5 per cent.

It is far from my intention to urge the claims of any therapeutic agent merely because the death-rate in a particular series of 147 attacks happens to come out somewhat lower than the average under other methods of treatment. The drug would have to be tested in a far larger number of cases before any trustworthy inference as to its value could be drawn from a consideration of the death-rate alone. As an illustration of the fallacy of generalizing from insufficient data, I may mention that of the first 50 cases treated with oil of cinnamon only two died, whereas, amongst the next 50 no less than eight proved fatal. After careful observation of the progress of the individual cases comprising the series I can only express my firm conviction that the in-

fluence it exerted in the large majority of attacks was a good one, and that a certain proportion of the patients who recovered would not have done so had the cinnamon been withheld and the treatment been conducted on purely expectant lines.

The favorable effects which were noted as attending the administration of the drug were:—

1. The temperature in the majority of cases ran at a lower level than is customary in enteric fever, the mean of the daily records taken every four hours approximating 101 degrees instead of 102 degrees or more during the full development of the fever. This effect was a good deal more pronounced in cases brought under the treatment at a comparatively early stage of the disease.

2. The patients remained for the most part drowsy throughout their illness, many of them evincing a constant tendency to sleep, as a result of which mental rest was secured and delirium was less frequent. Here, again, the good effect of early treatment was apparent.

3. Intra-intestinal decomposition, as evidenced by abdominal pain, distension, and fetor of the stools, was controlled to an extent which was really very striking. A considerable amount of success in this direction can usually be obtained with various other antiseptic agents when administered in adequate and sufficiently frequent doses, but that the oil of cinnamon is especially efficient as an intestinal antiseptic is evidenced by the fact that, with the exception of several patients in whom the condition was present at the time of their admission to the hospital, no single instance of meteorism occurred among the 147 cases which were treated with it.

The soporific influence which cinnamon in full doses is seen to exert in so many patients is a factor of undoubted value in the progress of the attack. Despite the nausea, and even vomiting, which cinnamon occasionally induces when given in too large a dose at the outset, the remedy soon established itself in the favor of the nurses, who often remarked on the drowsy, restful condition of mind which resulted from its continued administration—a condition of mind so eminently desirable in a person suffering from enteric fever. To obtain the full effect of the cinnamon a dose of from two and a half to five minims of the essential oil should be given every two hours from the time the case first comes under treatment until the temperature has fallen to the normal. I am in the habit of continuing its administration every four hours during the first week of convalescence and then three times a day for a week longer. The patient, there-

fore, is kept to some extent under the influence of cinnamon, for a period of a fortnight after the febrile stage has passed. It is well, however, to give the drug in smaller doses to begin with so as to accustom the patient gradually to its very pungent taste. By commencing with a dose of two and a half minims and increasing it to four or five minims, in the course of a few days the likelihood of vomiting being induced by the cinnamon is materially diminished. Care should be taken that the quality of the drug is above reproach. The better quality of oil is distilled from the cinnamon bark. It tends to become darker on keeping and its odor is by no means unpleasant. Cinnamon oil of an inferior quality is distilled from the leaves of the tree. It is usually lighter in color than that prepared from the bark and it is very much less expensive. This inferior oil should never be used medicinally, as patients do not take it so well and its action is probably less efficient.

The nausea and consequent repugnance to the taste of cinnamon which some patients evince may usually be overcome by using some discrimination in respect to the dosage at the commencement, coupled with the exercise of a little tact and persuasion on the part of the nurse. Should, however, the pungent flavor of the drug still continue to be a source of complaint, the difficulty can be obviated by giving the oil in gelatin capsules. Some patients, however, do not swallow these cachets very readily, and prefer to take it made up in the ordinary way as an emulsion. With a dose of from three to five minims, administered every two hours, the system soon becomes fairly saturated with the cinnamon. Its characteristic odor is very noticeable in the breath, in the exhalation from the skin, and is readily detectible in the stools in most cases. In the urine, however, the odor of cinnamon can rarely, if ever, be detected.

Being desirous of estimating the antiseptic influence which cinnamon oil is capable of exerting on the growth of the typhoid bacillus, one of my colleagues, Dr. A. F. Cameron, kindly undertook an investigation into the question. Working with a 1 per cent. emulsion of cinnamon oil in distilled water containing the minimum necessary amount of mucilage and a twenty-four hours' broth culture of the bacillus, which agglutinated readily with a 1 in 200 dilution of typhoid serum, the procedure adopted by Dr. Cameron was as follows: A number of tubes containing five cubic centimetres of neutral peptone broth, after the addition of varying amounts of the cinnamon emulsion, were inoculated with a loopful of the culture and incubated at 37 degrees C. These were examined both as regards the appearance of the broth and

microscopically at the end of twenty-four, forty-eight and seventy-two hours, and the number and motility of the typhoid organisms were compared with the appearances noted in several control broths which, though inoculated at the same time, contained no cinnamon. The results may be summarized as follows: Whereas the broth to which the 0.1 cubic centimetre of the emulsion had been added showed no difference from the control at the end of three days in respect either to its appearance or the number or motility of its organisms, that containing 0.2 cubic centimetre of the emulsion by the end of twenty-four hours was distinctly affected, the organisms being certainly less numerous and their motility less active. Growth was still more inhibited in the case of the tube which received 0.3 cubic centimetre, while the tube which contained 0.5 cubic centimetre of the emulsion at the end of three days showed no growth at all. From these observations it would appear that an appreciable, though slight, inhibitory influence on the growth of the typhoid bacillus begins to be exerted by cinnamon oil in a dilution of about 1 in 2,600, and that when its strength approaches 1 in 1,000 its antiseptic effect is complete.

Except in respect to the remarkable freedom from meteorism, the incidence under cinnamon of the more serious complications of typhoid fever presented nothing very striking. Amongst the 147 cases, intestinal hemorrhage was noted in 17, which is somewhat above the average. Perforation occurred in 3, an incidence, on the other hand, which is rather below the mean. As regards the proportionate incidence of relapse it is difficult to speak with certainty. Some recrudescence of pyrexia occurred in 30 cases, but in the majority of these the symptoms were not sufficiently distinctive to justify the reaction being regarded as a true relapse. On the whole, however, I am inclined to think that relapses were of more than average frequency. Of the 14 cases which proved fatal, the majority may be said to have died from cardiac failure. In 8 of the fatal cases, the attack had been complicated by hemorrhage. In view of the fact that in certainly 3 instances progressive cardiac enfeeblement developed where there was no special reason to anticipate its occurrence, I have recently adopted the practice of giving a grain of sulphate of quinine with each dose of the cinnamon in all cases where a careful daily physical examination reveals a suspicion of circulatory failure, and the result has so far been reassuring.

In the foregoing remarks I have endeavored to present a brief summary of the general conception and application of certain recognized systems of treatment which are undertaken

with the idea of exercising a direct control over the morbid processes concerned in an attack of enteric fever. It now remains to consider what may be termed the alternative method, namely, the treatment of the disease from a passive standpoint, a method which is commonly spoken of as expectant or symptomatic.

The treatment of enteric fever on "expectant" lines implies the recognition of our inability to exercise a direct control over the course of the disease. Having seen that the patient is properly nursed and suitably fed, we are content to adopt a waiting attitude, and while carefully watching for the appearance of any unfavorable symptoms our efforts are confined to attempts at mitigating their severity should any of them threaten to assume a dangerous proportion. To what extent we are justified in adopting this attitude, having regard to the grave responsibility which devolves on us as medical adviser in charge of the case, is largely a matter of opinion. The very conflicting views which have been held upon this much-debated question have been arrived at partly as the result of practice, but to an even larger extent, I suspect, they are founded upon theory. For my own part, I hold strongly to the belief that the adoption of an entirely expectant treatment is not only fallacious in its conception but very mischievous in practice. It connotes a tendency towards *laissez faire* which can neither be in the interest of the medical attendant nor of his patient. The brilliant success which has been achieved by the cold-bath treatment when properly carried out, as instanced by the results I have already quoted, is in itself an overwhelming refutation of the claims of simple "expectancy." While we are forced to admit that at present we know of no remedy for enteric fever capable of neutralizing the active infectious processes which are undermining the system and of thus curtailing the attack, as has been found possible in some other specific diseases, it by no means follows that we are powerless to influence the development of certain secondary results which experience has taught us are likely to arise during the course of the illness and materially to prejudice the prospects of a favorable issue. Experience, on the contrary, tends to show that by the intelligent employment of remedies which are theoretically sound, we are not only enabled to relieve symptoms which are an actual menace to life, but in some instances we are able to anticipate their full development, if not prevent them altogether. When, then, I am asked, on what general lines I would recommend the treatment of a case of enteric fever. My answer is, That in the absence of a specific I would treat the case on symptomatic lines, but that I would employ in addition from the

earliest date possible such remedies of either an antipyretic or an antiseptic character, or both, as appeared to be specially suited to the character of the attack and the idiosyncrasy of the individual.

In a great many cases of enteric fever, doubtless, no medicine at all is required, but that unfortunately is a fact which can only be proved by the result. I cannot help feeling, in view of the remarkable success which has been achieved with the cold-bath treatment abroad, that we who have charge of the treatment of enteric fever in hospitals are incurring some responsibility in withholding its use, save in the occasional instances I have already referred to, where the cold bath is clearly inadmissible. The method is attended with certain difficulties, it is true, but I really doubt whether one is justified in allowing such objections to weigh, and whether, on the contrary, it is not our duty to impress upon the patient and his relatives the extreme desirability of engaging upon that line of treatment from the onset. In private practice the objections must necessarily carry more weight and I fear that as a routine method of treatment the cold bath is never likely to be regarded with favor.

We not infrequently encounter attacks in which toxemia is very apparent, cases which, as Sir William Broadbent has pointed out, are characterized by the occurrence of dark, foul-smelling evacuations and fulness of the abdomen at quite an early stage of the attack, coupled with much nervous depression and a high temperature. In such cases antiseptics are especially indicated, and it is of first importance that their administration should be commenced as early as possible. It is always well, as a preliminary measure, to rid the lower bowel of its putrid and offensive contents, and thus assist in bringing the intestinal tract into as sanitary a condition as possible. To achieve this much-to-be-desired result there is nothing so effective as calomel, and in this class of attack I would recommend the administration at the outset of three or four grains of calomel in the case of an adult, followed in a couple of days by another dose of three grains more.

It is, of course, desirable to get this part of the treatment over by the time when it is assumed that ulceration has become established, that is to say, by the middle of the second week; but in view of the serious nature of the condition and the paramount importance of curtailing, where possible, the absorption of toxic products at the surface of the bowel, and having regard, moreover, to the remarkable degree of benefit which is usually secured, I would never hesitate in a case like this to give calomel at a somewhat later stage of the disease, if necessary. Should a

free evacuation not be obtained, especially if the abdomen still remains tumid, an enema of soap and water, with the addition of an ounce of turpentine, should be administered without delay. The improvement in the general aspect of the case brought about by these simple measures is often very striking, apart from the obvious relief to the abdominal condition which they usually afford. The antiseptic influence initiated by the calomel should be maintained by the regular administration every few hours of one of the antiseptic agents I have already referred to. It does not follow that the same drug is necessarily the best in all cases. In some, particularly where distension of the colon tends to persist, the continuous administration of turpentine in ten minim doses will prove especially useful, though it is well to substitute some other antiseptic for it in the presence of marked albuminuria. Taking all things into consideration, I am disposed to regard the oil of cinnamon as the most suitable antiseptic to employ in the large majority of such cases. It should be given in from three to five minim doses every two or three hours in the way I have already indicated.

Sir William Broadbent, whose views on the treatment of typhoid fever must always command respect, states that in this class of case he has been impressed with the value of perchloride of mercury, given every three or four hours, in conjunction with a grain or two of sulphate of quinine, the treatment being continued over a period of several days. I have tried the combination, in a limited number of cases, it is true, but in my own hands it has not proved so effective as either the oil of cinnamon or the quinine and chlorine mixture.

There is another class of case in which the cinnamon treatment is especially serviceable, viz., that in which the patient evinces a constant tendency to mental perturbation. The source of his anxiety, perhaps, may be either his own physical condition, or the assumed insufficiency of his diet, or he may be unduly apprehensive as to the welfare of his family, or the conduct of his business during his absence. In circumstances such as these the sedative, and with some persons almost soporific, effect which the cinnamon exerts is frequently of the utmost value. Such patients, when fully under its influence, will often cease from worrying altogether and pass the major portion of their time in quiet, restful sleep. So important is the securing of mental rest to the victim of enteric fever that in a good many cases it is no exaggeration to say that treatment of the mind is the most cogent indication throughout. It is in these circumstances, too, that opium is so valuable, and in the event of a patient continu-

ing to worry, despite the well-intentioned efforts of his attendants to distract him, I would never hesitate to give that person opium, and to keep him slightly under its influence until the cloud has passed. The objections which are usually urged against the use of opium in enteric fever, viz., its tendency to produce dryness of the mouth and constipation, and its liability to mask the early signs of perforation, are certainly not without force; but too much stress should not be laid upon them in view of the enormous gain to the patient which immunity from the fret of bodily pain or continued mental anxiety implies. More often than not the subjects to whom I refer are naturally neurotic, their temperament being apprehensive, fussy, or hysterical; but not necessarily so, however. I have seen the most inordinate anxiety exhibited by men who in their ordinary health are the reverse of nervous. But whether this apprehensive attitude of mind be merely the exaggeration of a normal characteristic or not, the good effect of opium will be equally patent. It is desirable, as a rule, to give the opium in small doses, frequently repeated. Five or six minims of the tincture administered every four hours will usually suffice for the purpose, or better still, the drug may be given in the crude form, a grain of the best Turkey opium being administered three or four times in the twenty-four hours. Needless to say, in the presence of pulmonary congestion or albuminuria, the use of opium calls for the greatest caution.

Another well-recognized variety of enteric fever is that in which the brunt of the attack appears to fall upon the nervous system. Such cases are often spoken of as "ataxic," the most prominent features comprising general prostration, muscular tremor, and early mental involvement, without, perhaps, there being any obvious symptoms of abdominal disturbance. For the treatment of these cases I know of nothing better, if, indeed, as good, than the administration of quinine and chlorine every two or three hours in accordance with the formula already quoted. I have been frequently impressed with the steadying effect of this combination, even without the assistance of alcohol, of which, however, a small amount is usually called for in the circumstances. The marked nervous apprehension which such patients are prone to exhibit may usually be allayed by giving a little opium. This sometimes takes the form of an active distrust of their attendants, particularly in the case of highly neurotic children.

Whatever view one may hold as to the value of the cold bath or the wet pack as a routine method of treatment, there is a consensus of opinion as to the efficacy of direct refrigeration as a

weapon against hyperpyrexia and in those grave cases of acute rheumatism in which an unduly high temperature proves refractory to the influence of salicine or the salicylates, there is no remedy to compare with the cold bath for its repression. Now, in enteric fever in this country, at any rate, it is certainly exceptional to meet with a temperature much exceeding 105 degrees, though its occurrence is not by any means uncommon in the tropics. When, however, a patient's temperature approaches this level the symptom pyrexia demands attention, and the need is emphasized in the presence of restlessness, stupor, or delirium. It is especially in the later stage of the fever when there is likely to be some degree of cardiac dilatation that the continuance of a high degree of pyrexia is fraught with danger.

During the late period of the attack it is seldom wise to put a person into a cold bath unless he has been acclimatized to it by previous experience, but in the early stage there would not be the same objection. As a means of reducing hyperpyrexia in enteric fever I much prefer the cold pack to the cold bath. When given with this object the whole surface of the body from the neck downwards, with the exception of the arms and feet, should be enveloped in a couple of draw-sheets wrung out of cold, or even ice-cold, water. A mackintosh should previously be spread upon the bed, but there is no necessity to use a bed cradle or further covering of any description. A blanket, however, may be thrown across the legs below the knees and a hot-water bottle encased in flannel applied to the soles of the feet, a provision which will materially lessen the patient's discomfort. The pack should be maintained for from fifteen to thirty minutes, its duration and the temperature of the water being regulated by the strength of the pulse and the amount of shivering or cyanosis which it induces. Some degree of shivering, however, must always be expected. On removal of the pack the patient should immediately be wrapped in a warm, dry blanket, and as soon as the skin has obtained a comfortable degree of warmth, he should be placed between the sheets and covered, preferably with a single blanket. It is always desirable to give an ounce or so of brandy before the application of the pack, since, apart from its primary effect in lessening shock and steadying the pulse, the antipyretic property of alcohol may be expected to supplement in some degree the action of the pack.

In occasional instances the reduction of temperature brought about by the bath or pack proves to be of a very temporary character, the pyrexia in the course of an hour or two attaining its former level. In these circumstances the bath or pack should

be repeated, and a dose of from 15 to 20 grains of sulphate of quinine, combined with from 15 to 20 minims of laudanum, administered half an hour or so after the operation is completed. By the administration of quinine it is usually possible to prolong the effect of mechanical refrigeration, a fact well known to Brand and his followers. Liebermeister frequently employed the drug as an adjuvant to the regular cold bath treatment. The effect of the laudanum is materially to augment the capacity of quinine as a temperature depressant, the explanation of which appears to lie in the power possessed by opium as a vasodilator in stimulating the cutaneous circulation. In tropical regions where, partly owing to a difficulty in obtaining cold water, and in part owing to the frequent presence of a malarial taint, the treatment of hyperpyrexia largely consists in the administration of quinine the peculiar value of the combination is well appreciated.

The employment of large doses of antipyrin, phenacetin, or acetanilid, though each more powerful than quinine in reducing temperature, is not to be recommend for the treatment of hyperpyrexia owing to their depressant effect on the heart. Acetanilid I regard as especially dangerous, having on two occasions seen the administration of five grains followed by very severe collapse.

Cold sponging of the surface, though capable of reducing pyrexia when properly carried out, is chiefly valuable on account of its sedative influence on the nervous system. As an antipyretic it is inferior to the cold pack and, unless the sponging be carried out with iced water, should not be relied upon in cases where the pyrexia is excessive. For the abatement of restlessness, however, and the promotion of sleep, cold sponging is admirably adapted, especially when associated with pyrexia of moderate degree. On account of its cooling and hypnotic effect it is well to have the patient sponged down every morning with cold or tepid water, to which a few drops of eau de Cologne or spirits of lavender have been added, as a routine procedure and to continue the practice until the establishment of defervescence. Let me add a word of caution against the inefficient and perfunctory manner in which cold sponging is far too frequently carried out. To be of any use the sponge should be charged as full as it will hold and the water effectively sopped or "soused" on to the skin, the necessity of having previously placed a mackintosh under the blanket on which the patient lies being all the while apparent. Merely to wipe the surface over with a well-wrung sponge, as is so often done, partakes more of the nature of a rite

than a serious measure of treatment. As a refrigerant the proceeding is next to useless.

In cases where the restlessness fails to give way to cold sponging, properly applied, and sleep remains a stranger, a trial may be made of one of the numerous hypnotic drugs which are available for the purpose. In ordinary circumstances I prefer to give from 30 to 40 grains of chloralamid or half that amount of trional, the drug in each case to be repeated in lesser amount at the expiration of a couple of hours, if necessary. In cases where insomnia exists in association with diarrhea and abdominal pain, the preparations of opium are especially useful, and from 15 to 20 drops of laudanum or 10 grains of Dover's powder are either of them likely to prove a successful hypnotic. Retention of urine is an occasional source of restlessness in men, but this, of course, can be readily relieved by the passage of a catheter. The fact, too, that a condition of rectal discomfort, the result of an inefficient action of the bowels, is sometimes directly responsible for a sleepless night must not be overlooked. In these circumstances a simple enema will usually bring relief and nothing more be wanted.

Now, in respect to the treatment of diarrhea considerable difference of opinion exists as to the point at which the symptom calls for interference. If it be moderate in amount and unattended with abdominal pain, the diarrhea may well be left alone, provided always that the dietary be suitable and its quantity not excessive. It has been well and truly said that careful daily inspection of the stools supplies the key alike for regulating the diet and for the treatment of diarrhea in a case of typhoid fever. If in any case the number of the stools exceed four or five in the course of the twenty-four hours and the amount evacuated be considerable, I have no hesitation in saying that the diarrhea should be controlled without delay, since the continued drain of fluid and consequent deprivation of nutriment which it involves may speedily prove a greater tax on the patient's strength than is consistent with ultimate recovery. The older view that the diarrhea of typhoid fever is of eliminative value as representing a spontaneous effort on nature's part to get rid of the fever poison and on that account should be allowed to go unchecked is hardly deserving of serious consideration. It is a belief which has had its day, but by consensus of modern opinion is now regarded as unsound in theory as it certainly is most mischievous in practice.

Having satisfied oneself from the character of the stools that the feeding is not at fault, the milk, if needs be, being either

restricted in amount or peptonized or more diluted, the means of checking diarrhea which I would recommend be employed first is the administration of a starch and opium enema. A couple of ounces of thin starch gruel, slightly warmed, and with the addition of half a drachm of laudanum, should be given by the rectum immediately after each loose stool. In my experience this treatment is rarely unsuccessful and one or two injections will usually suffice. Should, however, the diarrhea persist, an opiate may next be tried by the mouth, and both chlorodyne and Dover's powder are useful preparations. By their power of inhibiting peristalsis apart from their anodyne properties, they are likely to control the flux, while relieving the colicky pain by which it is so often accompanied. Astringent mixtures containing bismuth, catechu, tannic acid, chalk, and opium have been widely used, as in the treatment of diarrhea unconnected with typhoid fever, and their effect is often beneficial. The mineral astringents, such as sulphuric acid, acetate of lead, and sulphate of copper, I confess, I do not like and have long since ceased to use them.

The application of an ice-bag to the abdomen is a method which has been employed a good deal of late. It is a remedy of undoubted value especially when the diarrhea is associated with distinct abdominal tenderness. Personally, I much prefer the use of a large wet compress made of from four to six layers of soft bath towelling frequently wrung out of cold or ice-cold water. This should be large enough to cover the whole of the abdomen, and the edges may with advantage be bound over with a strip of jaconet with the object of preventing the dampness from spreading to the bed. A light wicker cradle should be placed over the patient and over this should be laid a single sheet; but a blanket with the addition of a hot bottle, if desired, may be wrapped around the patient's feet in order to increase his comfort. By this arrangement the cooling effect of the compress is fairly well maintained, since the evaporation of the water is but little impeded. A lengthened experience of its use has led me to believe that of the various therapeutic measures which are employed in the treatment of enteric fever there are few more valuable than the continued application of a cold compress to the abdomen in cases where definite tenderness can be elicited on slight pressure over some part of the surface, whether diarrhea be actually present or not.

Such tenderness, in the absence of marked distension, would appear to denote the presence of local peritoneal irritation at the site of one or more of the affected Peyer's patches. The irrita-

tion is an indication of danger, pointing at an early stage of the fever to intensity of the inflammatory process at that particular spot, while at a later date it points to depth of ulceration. One is prepared to believe, therefore, that the continued application of cold to the surface of the abdomen might exert a sedative influence locally on the inflammatory foci in the bowel wall and at the same time tend to control peristalsis, quite apart from the general antipyretic effect which must result from the continued abstraction of heat from a comparatively large portion of the bodily surface. Patients on being closely questioned will often admit that they are conscious of a constant feeling of tenderness or "soreness," not amounting to actual pain, at some particular part of the abdomen, the situation to which it seems to be most often referred being either the hypogastrium or the neighborhood of the umbilicus. It is in these circumstances that I have found the continuous application of an ice-bag, or, better still, a cold compress, to exert such a favorable influence. For the relief of intermittent abdominal pain, which is usually of a more or less colicky nature, the preparations of opium are probably unsurpassed.

Now, although in the more severe attacks of enteric fever diarrhea is certainly the rule, the condition which we are far more frequently called upon to treat is its converse, constipation. My own practice is to give a simple enema of soap and water, in quantity not exceeding a pint, in the morning of every third day in cases where the bowels fail to act spontaneously. If the quantity of milk allowed in the dietary be not in excess of the patient's digestive powers, this interval is not too long; but the enema may with advantage be given every second day in the event of the stools produced being large or their character not entirely satisfactory. To obviate the constipation, which is an almost constant feature of early convalescence, one naturally turns to one of the many aperient waters which are so much in vogue at the present day. So long as it is necessary to keep the patient in bed, however, their action after the first day or two frequently proves disappointing, in which case a teaspoonful of castor oil, combined with an equal quantity of glycerine, may be given with advantage in the early morning, and the dose, if necessary, may be repeated once or twice at intervals of an hour with perfect safety.

Meteorism, if present in any marked degree, must always be regarded as a serious condition, and its relief in every case should be attempted. Apart from the discomfort, or even distress, to which it usually gives rise, abdominal tension, by impeding the

descent of the diaphragm, is conducive to pulmonary congestion, and at the same time is liable to prove a source of serious embarrassment to the cardiac mechanism. Whether or not meteorism, by stretching the bowel wall, is capable of influencing to any extent the risk of intestinal perforation, will necessarily depend upon whether the distended portion is the seat of ulceration. Considerable differences are to be found in this respect in different cases, in some practically the whole length of the bowel being more or less involved, whereas in others the distension is almost limited to the large intestine. The former condition is the one more often present in those grave attacks in which a paralytic condition of the bowel at an early date results from the intensity of the typhoid poison, as also where tympanites rapidly develops as a result of general peritonitis. In cases, on the other hand, where the distension is practically limited to the colon, which appears to be more common, it would generally appear to originate in fermentative changes in the intestinal contents rather than a primary paralysis of the bowel wall. Rapid tympanites, however, coming on late in the attack is probably paralytic. In dealing with meteorism, therefore, it is always well to ascertain if possible, which part of the bowel is distended, since, in view of such decision, not only may we be able to form some estimate of its immediate danger to life, but an indication may sometimes be obtained which may not be without some value in its treatment. That such differentiation is impossible in many cases I freely admit, but, on the other hand, as the result of critical observation of the abdominal contour, assisted by careful percussion, it is often possible to arrive at an opinion as to whether or not the colon is distended.

If the diet be carefully regulated in relation to the patient's digestive power, meteorism is not likely to be a frequent symptom. This is particularly true if an efficient antiseptic treatment has been instituted from an early stage of the illness, and the value of the oil of cinnamon in this respect I have already referred to. But should distension arise in spite of every care, and there be reason to believe that the small intestine is mainly concerned in its production, the administration of opium in moderate doses and the application of an ice-bag to the abdominal wall are the means most likely to prove successful. In severe cases where tympanites develops rapidly at an early stage of the attack, a full dose of opium should be at once administered. In my experience the value of drugs of the antiseptic class, such as creosote, sulphurous acid, salol, sulphocarbolate of sodium, etc., for

the relief of tympanites when once it has arisen is almost *nil*, except in certain instances where the stomach is the seat of distension. Where, however, there is reason to believe the meteorism to be mainly, if not entirely, due to flatulent distension of the colon enemata of soap and water containing an ounce of turpentine are usually of the greatest value. In these circumstances the ice-bag had better be withheld, and opium too, except the pain continues. It is in these cases that the passage of a long tube through the sigmoid flexure may be expected to afford some relief, though the procedure is by no means always successful.

In the treatment of enteric fever the pulse should always be regarded as supplying an indication of the highest value, as, indeed, might be expected in view of the fact that in a large proportion of fatal cases, at least a half, death may be said to be directly due to circulatory failure. It is because of its power in reducing the mortality from what might be called "the pyrexial sources of death" that Hare and others who are strong in its support insist on the value of the cold bath treatment. Foremost among the causes which must be held to fall within this category is cardiac failure, though cerebral exhaustion and pneumonia must also be included. That the pulse should show some loss of strength as the fever progresses is only natural, and in the event of such loss being moderate no special treatment is required; but should the weakness become more pronounced, as evidenced by undue rapidity in relation to the temperature, dicrotism, or especially if a tendency to irregularity be noted either in force or rhythm, the cautious administration of stimulant is usually advisable. The form of alcohol best suited for the purpose, as a rule, is either brandy or whisky, of which, however, the quality, as also the quantity, should be regulated with discretion. In some cases the feebleness of pulse is associated with marked ventricular dilatation, in which case pulmonary congestion is very prone to arise and seriously to prejudice the issue. The good effect of digitalis in these circumstances is usually apparent, and it may with advantage be combined with strychnine. A certain amount of benefit, no doubt, would be derived from the administration of alcohol alone, but its influence often appears to be but temporary, and for producing a lasting effect it cannot compare in value with either strychnine, quinine, or digitalis.

Without for a moment desiring either to underrate the value of alcohol in cases where there is need of temporary cardiac reinforcement or to question its power to exert a steadying influence upon an exhausted nervous system, I rank myself with those

who hold that in most cases of enteric fever not only is alcohol not required, but that its employment is occasionally distinctly harmful, even when given in quantities which would not be considered excessive. The administration of a few ounces of alcohol, for instance, will sometimes markedly increase the restlessness in the case of a delirious person whose pulse is good and whose circulation is well sustained, especially when the patient is young and unaccustomed to take stimulants. Its use in these circumstances would be clearly injudicious, and in the presence of intestinal hemorrhage, its employment, except the case be desperate, would of course be inadmissible. The special indications which, I think, legitimately demand the use of alcohol in typhoid fever may be enumerated as follows: Constant delirium and sleeplessness associated with muscular tremor, feeble circulation, and a dry, brown tongue; undue weakness of the pulse, without other sign, as already described; cardiac dilatation, cyanosis, pulmonary congestion, and pneumonia; hyperpyrexia, excessive diarrhea, and intestinal perforation. Alcohol, moreover, may be given with advantage in the case of elderly persons and to patients who are taking their food badly, as also to those who are the victims of a persistent feeling of depression. In this latter instance the best form in which to administer the alcohol is a good champagne, though, as I have already said, either brandy or whisky is generally the most suitable stimulant in ordinary circumstances, at any rate during the pyrexial stage of the illness.

Though I fear it is impracticable within the confines of a single lecture to treat of all the exigencies which are liable to arise in the course of typhoid fever, no review of its treatment, however brief, could be regarded as satisfactory which did not contain some allusion to those two most grave accidents which always threaten, viz., intestinal hemorrhage and perforation. In respect to any power they may possess of arresting a hemorrhage in the bowel, it must be confessed that drugs have proved to be but broken reeds in practice, and the dictum generally credited to a late very distinguished physician that "hemorrhage from the bowels in typhoid fever must be allowed to cure itself," is as true to-day as when the words were spoken; but if, on the other hand, the saying be held to imply that by judicious management of the case we are powerless to assist in the attainment of this much-to-be-desired result, such inference cannot be too strongly contradicted.

The importance of absolute repose, alike of body, bowel, and mind is universally acknowledged. For the attainment of physi-

cal and mental rest we must largely rely on the care and common sense of a competent nurse and obedience on the part of the patient; whereas, rest for the ulcered and bleeding bowel can be secured by the prompt administration of a full dose of opium. I much prefer the use of opium in ordinary circumstances, but should the patient's state be really urgent the hypodermic injection of morphine may be substituted with advantage.

Since a state bordering on syncope must be held to provide the condition most favorable to the cessation of hemorrhage, everything calculated to stimulate the circulation should for the time, of course, be studiously avoided. Absolute abstention from alcohol, beef-tea, and stimulant meat extracts should be rigorously enjoined, and for the like reason and in order to avoid exciting peristalsis, the amount of nourishment should be reduced to the lowest possible point consistent with maintenance of the physical powers. The situation in severe cases is frequently a difficult one, and we are apt to find ourselves in dangerous waters. We are confronted on the one hand by the "Scylla" of possibly fatal syncope, and on the other by the "Charybdis" of additional hemorrhage, and to steer a safe course between them may call for the highest qualities of seamanship. The necessity for avoiding stimulation is universally recognized, but I think, perhaps, the influence which is exerted by the complete deprivation of fluids in keeping down the blood pressure and arresting hemorrhage is hardly so well appreciated as its great importance warrants.

The practice of giving astringents by the mouth in the belief that they will exert a direct styptic effect on the bleeding vessel in the lower part of the ileum is obviously futile, but the use of physiological hemostatics in order to attain this object indirectly has possibly more to recommend it. Ergot, ergotine, hamamelis, and hazeline have been widely employed, and still are, for the purpose. Extensive experience of their use, however, has led me to regard them as almost, if not entirely, worthless. Adrenalin chloride in frequent doses, however, I still employ in cases where the pulse tension is particularly low, since its administration I have sometimes thought effective. But whether any drug of the vaso-constrictor class, such as ergot or adrenalin, really plays any part in checking intestinal hemorrhage is exceedingly doubtful. Unfortunately, we have no opportunity of observing their direct effect, but having regard to the rise in the general blood pressure which follows their administration, it is difficult to avoid the suspicion that if they produce any result on the bleeding at all it should be to increase it.

In virtue of its undoubted power of augmenting the coagulability of the blood, the administration of calcium chloride in ten-grain doses every three hours is deserving of a trial, particularly in cases where the hemorrhage, though slight, appears to be continuous. The application of an ice-bag to the right iliac region is apparently of real benefit in persons whose abdominal wall is not unduly thick; and in proportion as the affected part of the bowel is near the surface its influence in controlling peristalsis and in constricting the intestinal vessels is likely to be of value.

Having seen that the patient receives a full dose of opium and that an ice-bag is carefully applied to the abdomen, our treatment of intestinal hemorrhage may be summed up in the single word "precaution"; and of the various measures we adopt with this in view, I believe *the complete deprivation of fluids,* excepting an occasional fragment of ice, to be the most important.

Now, with regard to the treatment of that dread complication, intestinal perforation, there are probably few physicians at the present day who would hesitate to advise operation as the only means of saving life. The only points on which some difference of opinion is likely to exist are as to the cases which are suitable for operation and the time at which it should be performed. Personally, I am in complete agreement with those who hold with Finney that a moribund condition of the patient should be the only contraindication. I have never yet come across the case in which recovery has ensued when once a diagnosis of perforation has been deliberately arrived at, although one knows that some instances of apparently undoubted perforation have been recorded in which success has been attained as the result of purely medical treatment. I do not think it is fair to accept a *post hoc, ergo propter* explanation of these cases and question the accuracy of the diagnosis on the strength of eventual recovery. I prefer to believe that in very exceptional circumstances a more or less localized peritonitis of perforative origin may be recovered from, but that the occurrence is so exceedingly rare as to justify one in entirely ignoring its likelihood when called on to decide upon the treatment.

Assuming the diagnosis of perforation to have been made and the necessity for operation admitted, the point of next importance to decide is the time most favorable to its performance. The answer to this question is supplied in the old adage, "There is no time like the present." The teaching of Keen in this respect, viz., that the second twelve hours after perforation represents the time most favorable to operation, has carried considerable weight, it being held that recovery from the primary

shock had better be awaited. The accumulated experience of the last few years, however, has clearly shown that if surgical treatment be postponed until reaction shall have set in, not only may the chance of a favorable issue have been allowed to slip, but the only opportunity for operation also.

The high importance, then, of immediate operation once admitted, the value of early diagnosis in the attainment of the best results will be apparent. Of the various symptoms which are recognized as indicative of the onset of perforation, the occurrence of sudden pain at some particular spot in the abdomen is properly regarded as the most suggestive, and if this be quickly followed by local tenderness and some degree of constitutional disturbance, the suggestion is greatly strengthened. Unfortunately, in something like 20 per cent. of cases the access of definite pain is wanting, in which case perforation in its initial stage is far more likely to escape detection. In the absence of local pain, however, the presence of even slight muscular rigidity, which, from previous examination is known to have newly arisen, must be regarded as an indication of the highest value, and its import is greatly strengthened in the event of any increase in the pulse-rate being detectable at the same time. The great value of this sign has been attested by Harte, of Philadelphia, who, when referring to the importance of individual symptoms in the recognition of perforation, speaks of muscular rigidity as the "keynote to diagnosis."

To those who have seen much of enteric fever the fact is well recognized that we may encounter cases of perforation in which every local symptom usually associated with the condition is conspicuous by its absence, while the general aspect of the case in other respects may be quite characteristic. Apart from the evidence which may usually be derived from a careful examination of the abdomen, I have come to regard the facies as perhaps the most valuable indication. To one who is familiar with the patient's usual appearance a slight but distinct change in the facies may be apparent, which is exceedingly difficult to describe, but which, especially when occurring with a feeble running pulse, may serve to show the cloven hoof in a way which nothing else will. When in addition there is present, or has recently been noted, some degree of shivering, the inference that perforation has occurred is very strong indeed. The frequency of shivering and its diagnostic importance as an early sign of perforation were strongly emphasized by Dr. E. W. Goodall in a very thoughtful and instructive paper on "Intestinal Perforation," which he read before the Hunterian Society last April.

I confess that I had not previously appreciated the value of this sign. It is easy, however, to be wise after the event, and I can now recall the occurrence of shivering more than once in cases which had perforated, but in which at the time no particular stress had been laid on its occurrence. As confirmatory evidence of perforation, obliteration of the liver dulness and the presence of fluid in the peritoneum are, of course, unrivalled, but in neither case are they likely to be apparent until a fairly confident diagnosis has been attained from other signs.

It is a golden rule in the treatment of typhoid fever to make a careful examination of the abdomen daily, for in proportion as our last examination has been recent so are we in a better position to appreciate the moment when any change in its condition may have occcurred. Accuracy of diagnosis is always desirable, but in view of the greatly improved results which have been attained of late it is better to recommend an unnecessary laparotomy than to allow a patient who has perforated to die without receiving the chance which operation affords. According to the figures published by Harte in January last, referring to 332 recorded cases of laparotomy after perforation, the recovery-rate has increased during the last twenty years from 10 to 31 per cent., that for the whole series being 26 per cent.; but whether the recovery-rate of all cases in which the operation has been performed is really as high as this is certainly rather doubtful.

On bringing these remarks to a conclusion I must express my regret at having been able to adduce so little that is new and still less that is original. We have arrived at a stage, it seems to me, beyond which any material advance in the treatment of enteric fever must be sought in biological sources, and when we regard the number of earnest workers in that particular field and the success which has attended their efforts in other directions, the future for enteric fever appears to be not without promise. While fully alive to its many deficiencies, I venture to hope that a record of personal impressions as to the value of various therapeutic measures which I have had occasion to employ during the course of some sixteen years' close association with the disease may prove to be of some little assistance to others who are equally interested in its treatment.—*The Lancet.*

Clinical Department.

New Method of Making Ring Test for Albumin. E. Agate Foster, M.D., of Patchogue, N.Y., in *American Medicine.*

I have read with interest the communication by William H. Bennett, M.D., of Philadelphia, entitled "A New Method of Making the Ring Test for Albumin," in your issue of December 3rd, 1904, and am surprised that so complicated a method should be deemed necessary in making so simple a test. When a pipet is used, it is unnecessary, as well as unsanitary, to draw the urine or acid into the pipet by suction with the mouth, as he states he has found to be the custom. It is sufficient to introduce the pipet into the solution, when the fluid will rise in the pipet to its level in the bottle or graduated test-glass. Then, by simply placing the index-finger over the top of pipet, the fluid, urine (or acid) can be lifted in the pipet from the specimen to be examined, and by removing the pressure of finger, allowed to trickle down slowly inside of test-tube to overlie the acid which has been placed there by a similar method.

However, even this is too slow. I have used for years an ordinary medicine dropper, on the same principle as one would fill a fountain pen.

The acid being first placed in the test-tube, any amount of urine desired can be slowly superimposed upon the underlying nitric acid. The white ring will usually appear at once, when even the smallest percentage of albumin is present. In using the nitric acid test, I have found it necessary to be absolutely sure of the strength of the acid, otherwise the result will be negative.

Spontaneous Rupture of the Heart in an Insane Patient. H. Kerr, M.D., Glasgow, Assistant Medical Officer to the Bucks County Asylum, in *The Lancet.*

This is a rare occurrence considering the frequency of degeneration of the heart muscle in the insane. According to the returns of the causes of death in the reports of the Commissioners in Lunacy for the years 1902 and 1903 it occurred nine times in 18,601 deaths, and of these four cases were those of males and five were those of females, showing that sex has little to do with its incidence.

In the present case the patient was a man, aged seventy-six years, who died in the Bucks County Asylum after fourteen months' residence. Mentally he was somewhat depressed and suicidal on admission, his condition passing into one of mild dementia. Physically he was rather feeble but stout and flabby. The pulse was regular but weak, the heart sounds were feeble and distant in character, and cardiac dulness was considerably increased. There was nothing of importance in the subsequent history of the case and the patient appeared as usual on the night of his death. He was found dead on the floor of his room, having apparently got out of bed and collapsed.

At the post-mortem examination the pericardium was found to be much distended with blood-clot and fluid. In the heart a small tear was found in the left ventricle, anteriorly, at the lower end near the apex in the long axis of the organ and plugged with blood clot. Internally the tear was found to be somewhat smaller than externally. The heart was much hypertrophied (weight 18 3-4 ounces), more especially the left ventricle, the muscle was soft, fatty, and very friable, while the valves and coronary arteries were atheromatous. The immediate cause of the rupture could not be determined, the factor of extra strain or stress being practically eliminated.

Therapeutics.

Acute and Chronic Nephritis.

In considering the treatment of nephritis it must be ascertained whether or not the condition is an acute or a chronic process; and if acute the cause of involvement of the kidney structure must be taken into consideration in outlining the treatment. If the process is a chronic one the clinical findings should show whether the tubal system is diseased to the greater extent or the toxic substances have chiefly involved the vessels along with an increase in the connective tissue formation; in other words, whether the diseased condition is chiefly parenchymatous or interstitial. The prognosis, of course, depends on whether it is acute or chronic. Even in the acute form it is a difficult task to forecast the outcome of the patient, as all patients are not alike, so for this reason, according to Sir Dyce Duckworth in the *Clinical Journal*, London, the prognosis of any form of nephritis should be guarded, as all patients have their peculiarities and temperaments, diatheses or qualities which are peculiar to them.

One man has a tendency in one direction and another in another. There is no medicine for disease, as this author tersely states, but for individuals. We do not treat disease, but patients. Some patients are much more vulnerable than others, especially those of a strumous diathesis. This sort of individual is vulnerable at all points, and if such a patient suffers from an acute nephritis the prognosis is not good, and may end in chronic nephritis. On the other hand, if a man suffering from acute nephritis is of good constitution and can obey the instructions of his physician and not expose himself to wet and cold, and observes care in regard to his diet the prognosis for complete recovery is good. In the treatment of acute nephritis the author recommends a warm bed, bread and milk diet, barley water and whey. Of the latter the patient may take two or three pints a day. He may also have arrowroot, bread and butter, crackers, and if he is very hungry he may be allowed a small amount of mashed potato. These patients should not have meat nor strong food.

If the urine contains much blood, as may be the case in acute nephritis, dry cupping should be employed. If he is strong, the author recommends that wet cupping be employed, and that from twelve to fifteen ounces of blood be taken from the loins in this way, as there is direct vascular connection between the skin of the loin and the interior of the kidney. Warm poultices over the loins are also of great service. Antimony in the form of the wine is very good given in one-half dram (2.00) doses, combined with spirits of nitrous ether, and a solution of ammonium acetate.

At the onset of the disease, a calomel purge should be given, two grains combined with half a dram (2.00) of compound jalap powder and afterward give two teaspoonfuls of a confection containing from a half to one dram of the compound jalap powder. This treatment, according to Duckworth, clears the renal tubes and diminishes the dropsy of the limbs and face. The patient should be confined to the hospital until all the albumin has disappeared from the urine. Iron is another preparation which is of value in these cases given in the form of ammonio-chlorid of iron or Basham's mixture, and may sometimes be combined with digitalis. Fuchsin is also recommended in doses of from one to ten grains (.06-.65) daily, as it sometimes decreases the amount of albumin, and at any rate does no harm if it does no good.

CHRONIC BRIGHT'S DISEASE.

Croftan, in the *Ill. Med. Jour.*, is of the opinion that Bright's disease is produced by circulating toxins and that the cardio-

vascular changes precede the kidney changes, as the result. The source of these toxins is two-fold, the gastro-intestinal tract and the products of metabolism. The liver does not functionate properly, and as a result there is incomplete elaboration of the food before it reaches the circulation. The management of a case of Bright's disease according to Dr. Croftan should be considered under: (1) prophylactic treatment; (2) symptomatic, directed primarily against the development of cardio-vascular changes, and secondly, against the nephritic changes; (3) the treatment of the patient as a whole.

TO PREVENT INTESTINAL PUTREFACTION.

The diet should be properly guarded and the stomach washed out if necessary. The author recommends especially in this connection the use of zinc sulpho-carbolate given in doses of one grain (.06) each at frequent intervals, together with about twenty grains (1.30) of bismuth daily. If the zinc preparation is used in sufficiently large doses it will prevent the black stools of the bismuth, as it checks putrefaction, and thus prevents the formation of bismuth sulphid. The color of the stools, therefore, should govern the amount of the zinc salt given daily and when this is obtained the urinary evidence of bowel putrefaction will disappear, as shown by the reduction of indican, etc. The bile salts are also of value in this same connection.

To strengthen the heart and to reduce the blood pressure, small doses of digitalis are recommended, one drop (.06) of the tincture, three times a day, is a sufficiently large dose to render the heart less susceptible to the disturbing stimulation of the circulating toxins. Large doses of digitalis are contraindicated. Nitro-glycerine is the best remedy to reduce the blood pressure. As adjuvants to these preparations the hot bath, rest in a warm bed, life in a warm, dry climate and massage are of value.

The author believes in a liberal diet and one which will least irritate the kidney and at the same time adequately nourish the patient. He condemns the use of an exclusive milk diet, as it must be given in enormous quantities to properly nourish the patient. If administered in such large quantities it causes flooding of the heart and arteries with water, and thus overtaxes them. It is deficient in iron, and in time leads to deficient hemoglobin, and its use, sooner or later, becomes monotonous. The diet, therefore, should be a mixed one, and should contain a moderate amount of albumin.

The amount of water should be restricted; for the kidney,

when it becomes diseased, stops eliminating water as the first thing, consequently the practice of "flushing out" the kidney should not be encouraged. The chief advantage of "sweating" is to get rid of the water.

WITHDRAWAL OF SODIUM CHLORIDE.

The nephritic kidney fails in properly eliminating sodium chloride, and, therefore, favors edema, as the salt draws water from the tissue by the process of osmosis. Consequently, the ingestion of salt should be restricted. The surgical treatment of decapsulating or splitting the capsule is condemned by this author.

USE OF WATER IN NEPHRITIS.

Broadbent, in an abstract in *American Medicine,* states that the use of water depends on the time when it is taken. A glassful taken night and morning makes it effective as an eliminant. Specific growth of the urine is a more important factor in this disease than the amount of albumin. The tension of the pulse is an indication in the prognosis and treatment. When a high tensioned pulse is present he employs a mild mercurial aperient. According to his statement, the effect on the arterial tension of a single grain of a mercurial preparation with slight aperient action is much greater than repeated liquid motions induced by saline; and the renal elimination is increased by the mercurials. This author believes, also, that the starting point of chronic nephritis is some impurity in the blood which acts as an irritant, that by its elimination the renal trouble may be prevented, and that calomel aids in this elimination. Acting on the basis that uremic convulsions are caused by interference with the cortical circulation of the brain, he frequently advises venesection in this condition, but when there is only threatened uremia he orders free purgation by calomel, which usually causes the symptoms to disappear, and the tension of the pulse to be reduced.

SURGICAL TREATMENT.

An account is given in the same periodical of six cases of Bright's disease operated on by P. Rosenstein, and decapsulation of the kidney performed with negative results in every case. The author's conclusions are as follows: Decapsulation of the kidney in grave Bright's disease is a dangerous operation; a permanent cure has not been recorded in any case; improvements were noted, but in one of the improved cases the albumin and casts continued to exist, only the edema disappearing; in the other, headache and scotoma persisted.

INDICATIONS FOR TREATMENT.

The indications for treatment of chronic Bright's disease may be summed up as follows:

1. Early in the disease, to reduce the effect of the toxic substances, in the circulation, on the heart, arteries and kidney substance.

2. When the arterial tension becomes pronounced, to use means to reduce it.

3. Support the heart in well-advanced cases and promote elimination by bowels, skin and kidney.

In carrying out the first point the diet should be light, non-irritating, but not confined to a strictly milk diet. It should include well-cooked vegetables and a small amount of farinaceous and animal food; at the same time produce free elimination by the bowels. The arterial tension may be lessened by the use of calomel aperients and nitro-glycerine. To check the progress of arterio-sclerosis, potassium iodid is recommended by some authorities.

In the treatment of the anemia Weir-Mitchell recommends large doses of the tincture of ferric chloride, from thirty to sixty minims (2.-4.) three times a day.

To support the heart early in the disease, caffein, spartein sulphate or moderate doses of strychnia are of value. Later in the disease, when the heart has become greatly enlarged as the result of its efforts to overcome the great tension in the arteries and vessels of the kidney, strophanthus and later digitalis are necessary. Strophanthus has the advantage over digitalis in that it is a good heart stimulant and does not contract the arteries as does digitalis, but it has the disadvantage, as stated by some authorities, of irritating the kidneys. The ordinary pill of calomel, squills and digitalis is a valuable combination in the treatment of this disease.—*J. A. M. A.*

Society Reports--Notes of Interest.

Dysmenorrhea: At the fourth Pan-American Medical Congress, recently held in Panama, Dr. Lucy Waite, of Chicago, stated that stenosis or flexion had nothing to do with causing dysmenorrhea; neither was childbirth the only cure. In three hundred cases the question had been put, "Have you had more or less pain since the birth of your child?" There was more pain in 135; 89 had less pain; in 76 there was no difference. After these data, Dr. Waite thinks operations for relief should cease.

Typhoid Fever: Dr. A. Alexander Smith, New York, said before the Practitioners' Society of New York, that bronchitis had been a prominent feature in thirteen out of thirty-five cases of typhoid fever, recently observed by him. The fact that two of these cases had been sent into the hospital with a probable diagnosis of acute tuberculosis, emphasizes the care to be taken in making a diagnosis between typhoid fever and acute tuberculosis.

Alopecia: Dr. L. Duncan Bulkley, before the Medical Society of the State of New York, gave an analysis of 755 cases of dermatitis seborroica, and 608 cases of alopecia. The latter disease he considers due to a parasite, although that has not yet been agreed upon by all observers. In the treatment of dermatitis seborroica he prefers lotions to ointments, if the scalp is involved, and the lotion he uses is composed of resorcin, alcohol, glycerine and rose water. In some cases he has used resorcin and chloral hydratis, and has found it give better results in these cases.

Cerebro-Spinal Meningitis: A symposium on the subject of cerebro-spinal meningitis was held at the recent annual meeting of the Medical Society of the State of New York. Dr. W. T. Councilman, of Boston, told of epidemics in Massachusetts in 1809, 1864, 1874, and in 1897, the mortality ranging from 20 to 75 per cent. In the last epidemic the mortality had been 65 per cent. Dealing with the symptomatology and diagnosis, Dr. H. L. Elsner, of Syra-

cuse, said he believed that Kernig's sign was an early manifestation of the disease, and that in 90 per cent. of the cases he had seen in six years it was present. He does not, however, consider it pathognomonic.

Water in Fevers: Dr. Beverly Robinson, New York (New York State Medical Association—County Branch), stated he believed in giving water freely in continued fevers. Debove's statistics regarding the treatment of typhoid fever patients with large quantities of water internally show excellent results.

Prostatic Hypertrophy: The belief now obtains, says Dr. L. Bolton Bangs, of New York, before the Medical Society of the State of New York, that prostatic hypertrophy is a chronic inflammatory process which usually has been in progress many years. Among the causes which may produce this condition are: Masturbation, sexual excesses, coitus reservatus, and gonorrhea. After carefully investigating over three hundred cases, Dr. Bangs states that in over 85 per cent. of these, some unphysiological sexual act was found as a causative factor.

Physician's Library.

During 1904, P. Blakiston's Son & Co., Philadelphia, sold 15,090 copies of Gould's Medical Dictionaries, making the total sales to date 181,173.

The Diseases of Society. By G. Frank Lydston, M.D. J. B. Lippincott Company, Philadelphia and London.

To those members of the medical profession who are interested in the "vice and crime problem," Dr. Lydston's work will prove intensely interesting. After twenty-five years of more or less constant study of this subject—part of which time was spent as Resident Surgeon to the Blackwell Island Penitentiary, New York—Dr. Lydston may well be regarded as an authority on this subject, which is so forcibly coming before the medical profession and society in general.

International Clinics," Vol. IV. Fourteenth series. 1905. J. B. Lippincott Company, Philadelphia and London.

This well-known quarterly needs no further introduction than to say that Vol. IV. of this series is quite up to the standard. A glance at the list of contributors, and the table of contents is sufficient to assure one of its general excellence. Among a long list of interesting articles one might mention " Functional Heart Murmurs: their Causation and Diagnosis," by Prof. Rudolf, of Toronto University, and the report of a case of nerve anastomosis for the cure of Infantile Palsy, by Dr. J. K. Young, of the University of Pennsylvania.

Medical Electricity: A Practical Handbook for Students and Practitioners. By H. Lewis Jones, M.A., M.D., Fellow of the Royal College of Physicians; Medical Officer in charge of the Electrical Department in St. Bartholomew's Hospital, London, etc. Fourth edition, with illustrations. Toronto: Chandler & Massey Limited. London: H. K. Lewis, 136 Gower Street, W.C. 1904.

This work covers the whole subject of electricity applied to medicine. The first six chapters are devoted to the consideration of the principles of electricity and electrical machines, such as induction coils, interruptors, accumulators, static machines and high-frequency apparatus. Then follows the consideration of the application of electricity to diagnosis and treatment of disease. The subject of electrolysis, Roentgen rays, high-frequency currents and photo-therapy, are given special attention. The subject of the electrical treatment in diseases of the nervous system, such as migraine, exophthalmia, goitre, writer's cramp, tremors, hemiplegia, infantile paralysis, neuralgia, neuritis, is fully considered and forms the valuable portion of the work. In teaching these sections one is given the impression that the author is recording his own experience in the treatment of these affections. The book is an excellent one. It is a clear and concise account of all the information which we now possess on the subject of medical electricity.

Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

A Royal Commission on Tuberculosis was suggested in these pages some months ago, and, perhaps, we may see same in the immediate future. At that time, although in some parts an organized effort was being put forth in an endeavor to prevent and treat cases of tuberculosis, still these efforts were only sporadic; in a great many other places the entire question was in a state of chaos. As all know, there has recently been adopted in the Federal House of Commons a resolution favoring governmental aid; and the very best form that such aid could take at the present time would be that which would provide for the payment of a commission to look into the entire matter as it affects the whole Dominion of Canada, and to report upon the best means of combating the advances of the disease, and of reducing its ravages. The appointment or selection of any such commission would no doubt lie in the hands of the Honorable the Minister of Agriculture; and this brings home to us the fact that Canada might well take a step in advance, and provide us with a Minister of Public Health. Every year there will be arising matters of public health, and if there is anything more worthy of attention than the health of a nation it is time we heard of it. Public medicine has advanced with huge strides in the last quarter of a century; and it seems anomalous to pro-

fessional men that business men should conduct the health matters of the Dominion of Canada in such an unbusinesslike method as at present prevails, where matters pertaining to public health are scattered through several departments. The Canadian Medical Association took the matter up some three years ago, and an efficient committee appointed to work. Work has been done; and, although, we understand, the Hon. Minister of Agriculture is favorable to the creation of a separate department, under a new or under his present department, the Government moves not. With a Royal Commission on Tuberculosis in sight, perhaps its appointment may act as a stimulus towards a general round-up on health matters, and a consolidation therein.

Dr. T. D. Crothers wrote a few months ago on "Sundown Journalism," which in ordinary Anglo-Saxon nomenclature means that there are ear-marks of inebriety on many of the journalistic articles of the present day. As Dr. Crothers is looked upon as having some considerable knowledge of inebriates and inebriety, he probably knows something whereof he speaks. After the sun is down, when the darkness of night envelops the land, the journalist with pen in hand swirls away, occasionally taking a nip from a black bottle. He reels off—and reels off. (Of course "Sundown Journalism" does not apply to medical journalists or to those practitioners of medicine and surgery who write journalistic articles for the medical press.) Dr. Crothers is a medical journalist himself, and he is not shying bricks at his brethren of the "fourth estate" of medicine. We are not quite sure how Dr. Crothers makes his diagnosis. Probably it is the uneven alignment which suggests the staggering gait. Probably it is because these articles may smell of the midnight oil (fusel). However, we think Dr. Crothers will have to try again, and let us have something about "Sun-up Journalism." Or how would "Moonshine Journalism" do?

The newspapers have discovered Dr. Osler with a vengeance, and such being the case things are bound to become mixed a little. It would certainly be a "skinch" for the younger and smaller fry of the medical profession if medical ethics would make the law that all over sixty would cease practising and retire to their laurels and their "cake." Or was it after forty we could all hope to eat "cake"? Or was it that a young man graduating at twenty-one could only hope to eat "cake" after

he had been twenty years in practice ? We are going to watch what an eminent American medical writer will have to say upon the question that a man is defunct at forty, and dead at sixty, or moribund at forty and dead at sixty, if that would suit better, for if we mistake not the gentleman we have in mind was graduated at forty and has made a world-wide reputation in the past sixteen years. Exceptions to the rule, as Dr. Osler says, only go to prove the rule, but where the exceptions are so manifest and abundant as to inundate the rule, it were better had that rule never been born. Dr. Osler will most probably soon pray to be delivered from the over-zealous public press, but then reporters generally belong to the age which makes the world. Why should they not be hilarious over the fact that they are it?

Just why medical colleges do not provide for the teaching of the history of medicine is because the curriculum is already filled to overflowing, and the harassed student does not need to be further overburdened. One may think what he will, but the reason why so many seek the walks of medicine in life is to make a livelihood, believing it can be done with very little work. After trying for awhile the tyro generally finds that he has made a huge mistake, and very often wishes for other employment. The study of medicine is a pleasurable and interesting study; the practice is a very different thing. One way to accomplish instructing the student-body in both the history of medicine and the code of ethics is to take these matters up in their own medical and literary societies, which now seem to be pining away for want of support. We cannot too often keep before us the example of the masters of the past.

The secretary of the Canadian Association for the Prevention of Tuberculosis met a handful of medical men in the Medical Library Building, on the afternoon of the 3rd of March, to interest them in the coming annual meeting of the Association at Ottawa on the 15th prox. So small was the attendance that it would appear that Toronto does not take a very active part in the workings of this organization; and, indeed, we doubt if any great progress will be made until governments recognize their responsibility in the matter of protecting the lives of the people. The public has got to be educated if consumption is to be lessened; and education of the public cannot take place without considerable expense. The Federal Government ought to bear the bulk of this expense. A paltry thousand dollar grant is not

sufficient. It will require ten to twenty thousand at the least per annum. There is another way the people can be educated. It is by means of the daily press. Every large daily should have attached to its editorial staff a medical man to supervise all medical news before publication, and to write upon matters pertaining to the public health. The newspaper first to take up this department will find it a profitable one.

The manner of collecting the annual subscription to the Canadian Medical Protective Association does not seem to be a popular one. An organization which has it in its power to fill an exceedingly large and important sphere in the medical profession of the Dominion should receive wide and generous support. All must come to recognize that this is purely a mutual benefit association designed only to protect its members. It is insurance from bother, worry, loss of sleep, and no end of trouble. It is soul-satisfying to know that if perchance a suit for alleged malpractice be brought in a court of law, an organization of your fellow practitioners is behind you upon whom the responsibility of your defence lies. The organization has now been in existence three years, and never once, so far as we know, has any one whom it defended been ordered to pay damages. At the most, at the present time, the Canadian Medical Protective Association could not have more than a membership of 6,000; it probably has one-twentieth of that number. In order to make it successful it must have a good membership, and 1,000 at the least should join and stay joined. It seems to be true that a great many do not care to be protected; and when asked to become members they consider that they are paying some sort of a compliment to the one who asked them to become members. Once a name is on the books, that name should be considered a member until, or as long as the organization lasts, and there should be a clause in the constitution to that effect. If a man joins an ordinary club he is responsible for his fees until he resigns from the privileges of membership. It would seem wise, therefore, for the secretary-treasurer to draw upon all members at the end of each year. Then as to getting in new members. The circular method is not considered a good one, and it is expensive. We all pay very little attention to the circular form of advertising; and as one practitioner expresses it these only act as food for the waste basket. Probably the President and Executive would consider it wise to appoint some one in each city and large town or county to collect and forward

fees to Ottawa. An executive of three or four for each province does not appear to fill the required end.

Speaking of organizations and associations, and the many of these we have in Canada, emphasizes strongly the fact that the Canadian Medical Association, the national and the parent organization, should be re-organized with provincial, city and county branches. We would have then, for instance, the existing provincial societies as provincial branches. The city societies could be made city branches, and the county societies, where these existed, could be made county branches, or branches established in every county. Thus could the medical profession all over the country become thoroughly organized, and be of untold service not only to itself, but would make the Canadian Medical Association an organization of a great deal of importance. It would also be sure to benefit in great measure the Canadian Medical Protective Association. It would help on those reforms which are required so much, the establishment of a Public Health Department and Dominion Registration. It could pronounce authoritatively for the medical profession of the Dominion of Canada upon all matters of medical policy pertaining to that profession. There must be in each county medical men progressive enough to organize these branches and keep them going. Say, for instance, the Oxford County Branch of the Canadian Medical Association be formed. No doubt most of the medical men in Oxford would join that branch. The constitution could be so framed that a member of a county branch would be as well a member of the provincial branch, in this case, the Ontario Medical Association Branch, or the Ontario Branch of the Canadian Medical Association, and so a member of the national organization. All fees, which ought to be at least $5 per annum, could be collected each year by the county branches, which should hold monthly or bi-monthly meetings. One dollar of this could be retained by the county branch, $2 forwarded to the provincial branch, and $2 to the national association. This reorganization would keep alive the present existing societies, and would not antagonize any of them. Communications on this subject for publication are solicited.

Editorial Notes.

"Chloroform at Sixty."— No reflective man reaches his meridian without realizing the value and sacredness of human life in its general sense as well as in its individual manifestation. The profession of medicine stands as the guardian of human life, and it is something of a shock to even the most careless that a representative of the profession should speak in favor of shortening the term of life as a routine measure. The Anglo-Saxon race particularly is exacting in its standards of dignity, sympathy, and insight for the physician, in its demands that he individualize, not generalize, in his measures. An utterance from a leader in the profession reflecting on the usefulness of existence beyond a certain period comes with depressing force to the sensitive, reacts with doubt and distrust upon the general profession. As a serious utterance it would be pessimistic in its every tendency; as a jest it is foreign to the genius of the profession, worthy only of the professional joker or the notoriety seeker. Dr. Osler, of course, cannot be classed under either of these categories, and it is peculiarly unfortunate, just on the eve of his departure from America to take one of the leading medical professorships in Great Britain, that a public utterance of his should be distorted by newspaper "enterprise" apparently to signify depreciation of human age-value. We have not seen the text of the address, but Dr. Osler telegraphs us: "Contradict, please, in *American Medicine*, that I advised chloroform for men at sixty. Wm. Osler." The sympathy of all physicians who respect the dignity of their profession and appreciate the value of individual human experience should be extended to Dr. Osler for his annoyance under this most recent instance of newspaper misunderstanding of professional ideals.—*American Medicine.*

"Oslerize" An Unfortunate Addition to the Dictionaries.— Lost is the journal, lay or medical, yellow, pink, or white, that does not nowadays have a column devoted to Dr. Osler's reported opinions concerning the value, or preferably the valuelessness, of older men. To oslerize, to be oslerized, or worthy to be oslerized, are new terms which the lexicographer must henceforth define. And with a groan! Because he will have to caution against confounding the term with *Bowdlerize,* which

also means to delete; the objects excised are somewhat different, although the methods and motives may be similar. It is true that a sense of humor is necessary to save us from a too burdensome insistence of the tragic realities of life, but then it must spring from a just estimate and accurate perception of "things as they are," and especially must it not, *per se,* become a serious pursuit. How the professional representative, and consequently the profession itself, stands in the eye of the newspaper is not wholly a matter of indifference to any of us. And that is as true, perhaps more true, even if the newspaper reader has false and distorted ideas of the opinions of medical men. The newspapers already credit two suicides to their absurd reports of the value of men sixty years old. Some six months ago an essay on the work of great men in the profession was published, from which a couple of sentences may be quoted:

Only rising, young, and unknown men bring the work and its value to recognition. It is indeed usually the young ones that make the discoveries. In science, Davy, Young, Fresnel, Arago, Forbes, Joule, Mayer, Helmholtz, Sir Wm. Thomson, Clausius, Rankine, and others, were in their twenties when they made their greatest discoveries.—*American Medicine.*

The Function of Men Over Fifty Years of Age.—It is true that the energizing discoveries and forces of the world are usually made and launched by the younger men. But there is another function and duty quite as valuable to humanity as discovery—more valuable, one must say—because discovery is bound to come soon or late, and by one mind, if not by another. The history of discoveries shows that they are practically made generations and perhaps centuries before the world accepts them. Their acceptance and utilization are, in a word, delayed by prejudice. By whose prejudices? Solely and simply by those of the elder men. They have passed the energizing and discovering time of life, and alas, they have not learned wisdom. Their true function is that of judgment, guidance, and advice; and almost without exception the older men, the so-called leaders of the profession, do not pronounce right judgment, do not guide expertly, do not advise correctly as to what and where is medical truth. It was twenty-two years after a clear-headed old farmer, who had been driven to practise vaccination by many years of observation of facts, had demonstrated the value of the measure —it was twenty-two years before Jenner dared inoculate the

Phipps boy. In announcing his discovery of thoracic percussion, Auenbrugger wrote:

I realize that envy and blame, and even hatred and calumny, have never failed to come to men who have illuminated art or science by their discoveries, or have added to their perfection.

The opposition of Liebig and other leaders to the theory of micro-organisms kept the world in ignorance of it for a generation. The work of Morton in the discovery of anesthesia, of O. W. Holmes in that of puerperal fever, of McDowell, and of Sims in gynecology, as well as of almost all discoverers, was killed as long as possible, and in exactly this way, and precisely by the elder men, the leaders, the judges, the official spokesmen of the profession. If inclined to be ironically humorous, one might suggest that a lecture to our brother elders might well be devoted to a criticism of their evident dereliction in this duty. Dr. Osler blames old men for being no longer young, a foolish criticism at best, and too indiscriminately made, because much of the energizing work and many of the great discoveries have been made by men over forty; but he fails utterly to say a word against their wretchedest fault—the rejection of new truth that the young have discovered.—*American Medicine.*

"The Surgeon and the Public" is the title of a paragraph in an article in a recent number of *McClure's Magazine,* designed to plebify modern surgical ideas and methods. The matter is thus introduced:

"With increased knowledge, the attitude of the surgeon toward the public is changing. Men like Murphy of Chicago, Keen of Philadelphia, Kelly of Baltimore, and Richardson of Boston, are in revolt, more or less open, against the old tenet that the truths of medical science must not be profaned by exposure to the ignorant lay mind. Within certain limits, they are making good use of the public press on a principle which I recently heard expressed thus:

"'It is an axiom of surgical practice that the earlier the case is taken, the better the chance of success. It follows that, if we can educate the public in the matter of the common surgical ailments, our patients will come to us more promptly, and we can get better results. Beside, with the mystery dissipated, the terror of operations will be greatly diminished. Take a very common case—appendicitis. I venture to say that the majority of persons believes the operation for appendicitis a very danger-

ous one. In point of fact, the mortality is less than in diseases which are not feared at all; measles, for instance, or whooping-cough. Could we implant that fact in the public mind and get all our appendicitis cases early, instead of at the last development, as many of them now come to us, we could reduce the present low mortality by half. The policy of silence is a relic. It was made for the days when a physician who talked exposed his ignorance. Surgery is no longer empiric; we know what we are doing and we can afford to tell it.' "

The article, however, closes with this quotation from Senn:

" We have waded through the slough of fads. We have left behind us such errors as opening the skull for idiocy, and in hundreds of insane asylums the needless victims of our rage for ovariotomy mark the path by which we have come back to rational methods in gynecology. There are still many who, led into surgery by the hope of rich rewards, have had no time to learn its scientific principles. Brilliant operators, they diagnose with the knife. Remember this: That, with rare exceptions, the knife should never be taken up until the trouble is determined. The time for conservatism has come. We are here to assist nature, not to dictate. The great art of modern surgery is to limit operations to the cases where they can be of benefit."

We have made these excerpts for the purpose of bringing into closer juxtaposition and contrast illustrations of the newspaper man's idea of logic. *" The knife should never be taken up until the trouble is determined,"* is set side by side with the appeal, real or supposed, to the lay public to decide itself when to come to the operating surgeon! The diagnostician, the internist, and the family physician are therefore to be dispensed with? According to the magazine writer the " trouble is to be determined " solely by the patient and his lay friends, educated by those surgeons who make " more or less open," but " good use of the public press." It is evidently a fitting opportunity for the surgeons to disclaim the injudicious zeal of the reporters.—*American Medicine.*

News Items.

CANADIAN.

THE typhoid fever epidemic at Winnipeg is at an end.

IT took $95,508 to run the Montreal General Hospital in 1904.

DR. D. S. HOIG, Oshawa, has been created an associate coroner.

DR. G. STIRLING RYERSON, Toronto, has returned from Atlantic City.

THE death is announced of Dr. Benjamin Hammond, of Portage la Prairie.

IT is rumored that the medical faculties of Bishop's and McGill will amalgamate.

DR. F. G. FINLEY has been re-elected secretary of the Montreal General Hospital.

THE Endowment Fund of the Montreal General Hospital now amounts to $75,000.

THE Diet Dispensary of Montreal has purchased a new home at a cost of $12,000.

DR. D. M. ANDERSON, Toronto, is recovering nicely from an operation for appendicitis.

THE number of patients treated in the Dauphin, Man., hospital during 1904 was 334.

THE medical men of Victoria, B.C., will deliver lectures in the public schools of that city.

THERE are now fifteen lepers in the Lazaretto at Tracadie, N.B., five females and ten males.

THERE were 3,156 patients admitted to the Montreal General Hospital in 1904. There were 251 deaths.

IN the out-door departments of the Montreal General Hospital, during 1904, there were 38,932 consultations.

DR. JAMES MCGREGOR STEVENSON, of Denfield, Ont., is dead. He was a gold medalist of McGill University.

THE Montreal City Council has voted an additional $700 to the Montreal League for the Prevention of Tuberculosis.

WINNIPEG will shortly provide its Medical Health Officer with an assistant, who will be a bacteriologist.

HEREAFTER the medical men of Winnipeg will be required to register all cases of typhoid fever occurring in that city.

THE Montreal General Hospital had an income last year of $83,589, which was $7,605 less than for the previous year.

THE death is announced of Dr. Niven Agnew, at Brandon, Man., on the 1st of March. Dr. Agnew was formerly of Toronto.

THE total number of patients treated in the Winnipeg General Hospital during January amounted to 593. The deaths numbered forty.

DR. NEIL J. MCLEAN, of Winnipeg, has qualified for, and is now enrolled as a Licentiate of the Royal College of Physicians, and a member of the Royal College of Surgeons of London, England.

DR. ALEXANDER MCPHEDRAN, professor of medicine in the University of Toronto, has recovered from an attack of la grippe and pneumonia, we are glad to state, and will go South for a convalescing period.

DR. WESBROOK, an old Winnipeg boy, has been elected President of the American Health Association. Dr. Wesbrook is State Bacteriologist of Minnesota, and a short time ago paid a visit to Winnipeg.

DR. BRACKEN, the Health Officer of Minnesota, was in Winnipeg a short time ago looking into the cause of the typhoid fever epidemic through which that city has passed during the last six or eight months.

DR. DRAESEKE, late surgeon on the C.P.R. liner "Athenian," has been visiting at his old home at Dundas, Ont. Dr. Draeseke will probably ship on the "Empress of China" as surgeon on his return West.

DR. SYDNEY E. TYNER, of Kingston, Ont., died in the New York Orthopedic Hospital, of spinal meningitis on the 14th of February. Dr. Tyner was graduated from Queen's last spring and had only recently gone to the New York Hospital to fill the position of House Surgeon.

THE death is announced of an old Winnipegger, Dr. J. A. Greig, at North Yakimo, Washington, U.S.A. Dr. Greig was a native of Kincardine, Ont.

THERE were 570 patients treated in the Toronto General Hospital during February. Twenty-one died and there were ten births in the lying-in department.

DR. J. D. LAFFERTY, Registrar of the College of Physicians and Surgeons of the North-West Territories, is spoken of as a likely Lieutenant-Governor of Alberta, once that province is created. Dr. Lafferty practises at Calgary.

THE Canadian Association for the Prevention of Tuberculosis, which meets at Ottawa on the 15th of March, has petitioned the Hygiene Committee of Montreal, asking to co-operate with Montreal City Council in the establishment of a sanatorium in the Province of Quebec.

A NEW wing was opened in connection with the Woodstock, Ont., Hospital, on the afternoon of the 14th of February. Amongst those present from Toronto were Dr. Charles O'Reilly, superintendent of the Toronto General Hospital; Dr. H. A. Bruce, Dr. L. L. Palmer, and Dr. B. E. McKenzie.

DR. WM. BURT, President of the Ontario Medical Association, recently paid a visit to the city to review the work done by the two main committees in advancing the Association's interests for the year. A considerable number of papers have been promised—these, with the assurance of Dr. Ochsner's presence already guaranteeing the success of the meeting. This will take place Tuesday, Wednesday and Thursday, the 6th, 7th and 8th of June, in the Medical Buildings, Queen's Park. The character of the work done by this parent Association of the province warrants the attendance of every practitioner who can get to hear the papers presented.

OFFICE OF THE PROVINCIAL BOARD OF HEALTH.—Deaths for January, 1905, from all causes as reported by 760 division registrars for the first month of the year are 2,216, and for the same month last year 2,200 were reported from a somewhat similar population. The population represented in these returns is 2,019,590, which makes the mortality rate 13.1 in 1,000, being the same as in 1904. As may be seen by the comparative table the total number of infectious diseases show a slight increase, which is largely due to the more complete return of measles, there being 236 more cases, but it is pleasing to know the deaths

are less by 5.4 per cent. Smallpox and scarlet fever show a marked decline, while diphtheria has been more prevalent, yet the case mortality remains much the same, being 15.2 per cent. in 1904, and 16.2 per cent. in 1905. Out of 412 cases nine cities reported 269 cases with 34 deaths. Typhoid fever with a greater number of cases reported, and fewer deaths would indicate that physicians are complying more readily with the Health Act in notifying health officers and Boards of Health of the cases coming under their care, or else the disease is of a milder type than that of a year ago. Tuberculosis caused 169 deaths, or ten less than in January, 1904.

COMPARATIVE TABLE.

Disease.	1905.		1904.	
	Cases.	Deaths.	Cases.	Deaths.
Smallpox	10	0	103	0
Scarlet Fever	223	12	380	24
Diphtheria	412	67	382	58
Measles	268	4	32	2
Whooping Cough	27	4	25	7
Typhoid Fever	69	21	39	23
Tuberculosis	174	169	179	179
	1183	277	1140	293

DIPHTHERIA BY CITIES.

Cities.	Cases.	Deaths.	Population.
Chatham	12	0	9,068
Guelph	1	1	11,496
Hamilton	36	3	52,634
Kingston	2	0	17,961
London	18	0	37,983
Ottawa	4	0	59,928
St. Thomas	1	0	11,485
Stratford	1	0	9,959
Toronto	194	30	208,040
	269	34	

UNITED STATES.

A First Aid Journal will be established in Chicago in March.

New York has a squad of twenty-five sanitary policemen, specially appointed to arrest evening "spitters."

It is stated that the army canteen will not be re-established at the present session of the United States Congress.

Dr. A. Jacoby, of New York, has made a presentation of 5,000 monographs to the New York Academy of Medicine.

The Appellate Court of Chicago, rules that a surgeon must get the consent of his patient before he performs a major operation.

The members of the Chicago Medical Society will shortly formally present to that body a memorial bust of the late Dr. Christian Fenger.

The University of Cornell's brainless frog which lived more than five years after its cerebral hemispheres were removed by Dr. Wilder, is dead.

Mrs. Elizabeth Fleischmann Ascheim, a member of the Roentgen Ray Society of the Pacific Coast, has had to have her arm amputated on account of X-ray burns.

The largest magnet for surgical purposes which has been constructed has an iron core of four and one-half feet in diameter, and was built under the supervision of a surgeon of the Bridgeport, Conn., hospital.

At the Samaritan Hospital, Philadelphia, occurred an example of the danger of ether administration near a gas jet. Three of the assistants were burned, one quite severely, but the operator and patient escaped unhurt.

The Medical Society of the County of New York considers that it is undesirable that in any directory other than a medical one, that large type be used for medical men, and that anything but the name, address and telephone number should appear.

Dr. E. C. Dudley, the eminent gynecologist, of Chicago, threatens suit against an educational society for using his name in connection with a "Practical Home Treatment" book of which he had no knowledge whatever until a canvasser called upon him to sell him a copy of same.

BRITISH AND FOREIGN.

THE first woman physician was Madame Boirin, who was given the degree of doctor of medicine about a century ago.

PROFESSOR KOCH has gone to South Africa to complete researches begun on the cattle plague.

THE death is announced of E. Abbe, the improver of the microscope. To him bacteriology owes its marvellous strides in recent years.

A COMPANY of British physicians and surgeons will visit Paris in a body, under the leadership of Sir William Broadbent, on May 11th, 12th and 13th.

PROFESSOR MIKULICZ was operated on by Professor von Eiselsberg, of Vienna, in January for umbilical hernia, and an uneventful recovery is reported.

IN nine months there have been but forty deaths from disease in the immense Japanese army commanded by Genéral Oku, although, since the 6th of May last, there have been 24,642 cases of disease. Of this number 5,070 were cases of beri beri.

A PARIS publisher recently issued a pamphlet on Atavism; and a young man, engaged to a widow, read it, and now refuses to marry the widow in case children by the marriage would look like the former husband. The widow is suing the publisher for $20,000.

THE first crematorium was opened in England in 1885, but cremation is not very popular there yet. The number of cremations performed since that time number 4,407. The success of the movement is the outcome of the untiring advocacy of the late Sir Henry Thompson.

A MEMBER of that well-known house of E. Merck, Darmstadt, Germany, Willy Merck, Ph.D., has had the honorary degree of doctor of medicine confirmed upon him by the University of Halle, Germany, by reason of the numerous meritorious contributions emanating from him towards the advancement of the therapeutic side of medicine.

Special Selection.

IRON THERAPY IN THE TREATMENT OF SMALLPOX.

By Martin C. Woodruff, M.D., St. Louis, Mo.

As far back as 1893 my attention was first called to Pepto-Mangan (Gude). But it was not until the spring of 1895, when I was appointed Superintendent of Quarantine and Smallpox Hospital at St. Louis, that I had opportunity to test thoroughly its merits.

Upon my entrance to the aforesaid institution I found 118 patients in various stages of variola. The sanitary conditions were not of the best, consequently septicemia, pyemia, boils and abscesses were of frequent occurrence; in fact, one ward of some twenty-five odd beds was used exclusively for this class of patients.

In my endeavor to combat this condition of affairs, my mind of necessity reverted to the iron preparations. After using iron in its numerous forms, I found it entirely too astringent and acid to exhibit for any length of time.

It was at this time that my previous experience with Pepto-Mangan (Gude) led me to make some experiments to ascertain for my own benefit the actual value of iron and manganese in these conditions.

After several months' continuous examination (microscopical) I found that in all cases of variola the hemoglobin was diminished to less than 42 per cent., and the red blood corpuscles were diminished to such extent that the actual average count in some eighty-five cases was less than 2,273,000. After four weeks' treatment (the general average time patients were confined to the institution) the hemoglobin had increased 50 per cent. and the red blood cells 46 per cent. Believing that these cases were exactly suitable and amenable to treatment by Pepto-Mangan (Gude), provided it would do what was claimed for it, I decided to exhibit it exclusively and prove the results by actual demonstration in the increase of the hemoglobin percentage and the increase of the number of red blood corpuscles.

The similarity of these cases of necessity make the history

of one the history of all. For this reason I will not burden my readers with a repetition of a number of cases, but will confine myself to a few exceptional cases.

CASE 1.—Age seventeen; diagnosis, variola confluens, followed by a general pyemia. Period of treatment, twenty-four weeks. First count 2,323,000, hemoglobin 42 per cent. Second examination, after eight weeks, red blood cells 3,722,000, hemoglobin 58 per cent. Third examination, sixteen weeks, red blood cells 4,122,000, hemoglobin 67 per cent. Fourth examination, red blood cells 4,899,000, hemoglobin 79 per cent. Result, cured.

CASE 2.—Age twenty-five; diagnosis, variola semi-confluens, followed by puerperal septicemia. Period of treatment, fifteen weeks. First count, 3,123,000 red cells, hemoglobin 62 per cent. Second examination, red cells 5,325,000, hemoglobin 89 per cent. Result, cured.

CASE 3.—Age sixteen; diagnosis, variola semi-hemorrhagic, uncomplicated. First examination, red cells 2,824,000, hemoglobin 42 per cent. Period of treatment, six weeks. Second examination, red cells 4,376,000, hemoglobin 83 per cent. Result, cured.

CASE 4.—Age ten; variola discreta with scarlatina, both infections occurring simultaneously, a most malignant and rare disease. In this double infection the anemia and depression were profound. First examination, red cells 2,036,000, hemoglobin 28 per cent. Period of treatment, eight weeks. Second examination, 5,102,000 red cells, hemoglobin 88 per cent. Result, cured.

At the beginning of my first term as Superintendent of Quarantine the mortality was 21 per cent. In twelve months it has been reduced to 9 per cent., and in the last year of my incumbency there were but sixteen deaths in 1,749 cases, showing the very low mortality of less than 1 per cent. It may not be generally known, but it is a fact, that death occurs in variola during the time that absorption begins to take place, which is about the twelfth day of the eruption.

Now, if by the administration of drugs the percentage of hemoglobin and the number of red blood cells can be brought anywhere near the normal before this period of absorption takes place, we, of necessity, increase the power of resistance tenfold.

I would not like to be understood as saying that the mere use of pepto-mangan caused the remarkable decrease in the mortality at our institution, though I am quite sure that it played a major part in producing the result.

During my incumbency as Superintendent at Quarantine Hospital, I had under my sole care a case of leprosy, which was finally pronounced cured after no recurrence had taken place for a year after a total abeyance of all symptoms. From first to last in the treatment of this case pepto-mangan was used as a tonic and reconstructive. The blood count was never made in this case at any time.

Eight years of my time was devoted exclusively to this institution, and I treated personally some 4,000 cases, and that my faith in pepto-mangan, as the very best treatment in variola, had not diminished one iota is exemplified by the purchase of quantities just prior to severing my connection with the small-pox hospital.

Before bringing this article to a close, I wish to make it plain that constipation throughout the entire course of variola is a contending factor. For this reason preparations of iron, which would further aggravate this condition, are contraindicated. At no time did I find this to be the case where pepto-mangan was administered.

Another and very great feature is the stability of the preparation. In my twelve years' experience with this preparation I have never found a single bottle with the least particle of precipitate. Last, but not least by any means, it being a perfectly neutral solution, it can be taken indefinitely without the least fear of injury to the patient's teeth.—*Reprinted from The American Therapist,* June, 1904.

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Original Articles.

COCAINE ANESTHESIA.*

By Ingersoll Olmsted, M.D., Hamilton, Ont.

Gentlemen,—When your President so kindly invited me to give a paper before your Society, I accepted with pleasure, not only on account of the honor you conferred on me by the invitation, but also for the pleasure it would give me in meeting again the members of the medical profession in London.

In searching for a subject which would interest you, I decided on Cocaine Anesthesia as one which would afford ample room for discussion. When in Berlin, in 1894, I visited Dr. Schleich's clinic and saw him make quite an extensive removal of a recurrent mammary carcinoma with his infiltration method. The efficiency of his very weak solutions of cocaine in producing complete anesthesia, together with the entire absence of toxic symptoms, was very striking indeed, and yet it was a long time before I felt justified in opening an abdomen with simply this form of anesthesia.

During the last few years I have used the infiltration of a weak solution of cocaine in a variety of cases, and the results have been all that could be desired. At first one feels hesita-

*Read at meeting of London Medical Society.

tion in doing major operations with a local anesthetic, but after a short time one learns to know what structures give pain, and also how those may be made analgesic. You have all seen cases where a general anesthetic seemed contraindicated, and also many cases where unexpected complications have arisen, such as bronchitis and pneumonia, which are attributable almost directly to the general anesthetic. At first much too strong solutions were used for injection into the tissues, and as a result many cases of poisoning were reported. Now, however, with very weak solutions one seldom sees an unfavorable symptom which may be attributed to cocaine. Undoubtedly in many cases it is much pleasanter to work when the patient is unconscious. There are many cases, however, where a general anesthetic adds a not inconsiderable quota of danger. Take, for instance, a patient with obstruction of the bowel, where fecal vomiting has already begun. An operation under such conditions is a serious matter. In one case I saw with Dr. Mullock, in Binbrook, the patient was extremely reduced, with a rapid, irregular pulse and subnormal temperature. We first washed the fecal matter out of the stomach, and then did an enterostomy with cocaine infiltration. The patient had neither pain nor shock. She said that the lavage was infinitely worse than the operation itself.

The first great advance made in this form of anesthesia was the manner of injection of the liquid, viz., the intradermal instead of the hypodermic method. The physical condition thus brought about aids materially in producing the desired result.

It was found that very weak solutions of cocaine produced quite as efficient anesthesia as strong solutions. Another important point in the preparation of the fluid for injection was to have it isotonic, that is, its specific gravity and freezing point must be the same as that of the tissues. Plain distilled water when infiltrated into the living tissues will cause pain, while normal saline solution will give practically no sensation of discomfort unless injected too rapidly and with too much force.

On account of the frequency of poisoning with cocaine, other drugs were sought for which were less toxic. It was found that B eucaine had analgesic properties, almost, if not quite, as pronounced as cocaine and with a decided advantage of being much less toxic; unfortunately the analgesia was found by many to pass off too quickly for a prolonged operation. With the addition of a small quantity of adrenalin chloride the small vessels become contracted and the eucaine or cocaine is retained much longer in the infiltrated area, and the anesthesia

is more lasting. Barker, for instance, recommends it strongly in combination with B eucaine. The formula which he uses is as follows:

Distilled water	100 c.cm. (3½ ounces).
B eucaine	0.2 gram. (3 grains).
Sodium chloride	0 8 gram. (12 grains).
1 pro mille adrenalin chloride	♏ 10.

The whole of the quantity may be used in one operation, and even twice as much has been used without the advent of toxic symptoms. He waits thirty minutes after the infiltration of the tissues before proceeding with the operation. The analgesia lasts, he says, for four hours. I have used the B eucaine, but prefer the weak cocaine solution.

Corning found in 1885 that if a nerve be injected with a few minims of cocaine, the area supplied by that nerve became analgesic. Cushing took advantage of this in the performance of the operation for hernia. After infiltrating the skin with weak Schleich's solution (which is)

Cocaine hydrochloratis	0.1 gram.
Morphine hydrochloratis	0.02 gram.
Sodii chloridi	0.2 gram.
Aquæ destillata ad	100 c cm.

he used a few drops of a one per cent. solution of cocaine to inject the small nerves (anterior branch of the ilio-hypogastric, the ilio-inguinal and genito-crural) encountered during the operation. By following these few rules, the operation becomes almost painless. I say almost, because the sack of the hernia, which is a portion of the parietal peritoneum, is quite sensitive, and requires to be infiltrated also. With these precautions a so-called radical cure may be done with extremely little discomfort to the patient. One old man, eighty-four years of age, on whom I operated for strangulated hernia, and who was in great pain during the first part of the operation, ceased his cries immediately after the constriction was divided, and the strangulation relieved. A modified Halstead was done without apparently any discomfort to the old gentleman. There was no shock and he made a rapid recovery, and without any of the disagreeable sequelæ of a general anesthetic. I have done only eight cases of hernia in this way, but of these, four were immutable for a general anesthetic. One, a man of sixty-seven years, with chronic phthisis, nephritis, and a strangulated inguinal hernia. He could not pass his water, and I drew off a small quantity which was loaded with albumen, and contained granular and

hyaline casts. He had a mitral murmur, and marked arterio-sclerosis. The third was a lady of eighty-two years, with strangulated femoral hernia. The bowel was gangrenous, and required resection. On drawing down the bowel she complained of pain, and she had to have a little chloroform. She died on the eighth day of uremia. These, with the case previously cited, were the only cases in which a general anesthetic seemed inadvisable.

In abdominal cases the patient can aid you materially at times by making negative pressure in the abdomen, and thus allow the closure of the peritoneum without the bowel or omentum coming into the wound.

It was formerly thought that cocaine solutions could not be properly sterilized, but further experience has shown that boiling does not destroy the efficacy of the drug, and I have frequently used a cocaine solution that has been sterilized two or three times, but usually a fresh solution is made and only boiled once.

There is one thing which should be always kept in mind when operating with a local anesthetic, and that is to handle the tissues with care, as any unnecessary rough sponging or retraction of the structures will give pain. If one retracts the parts gradually, it can be done without causing pain, but any sudden drawing back of the parts will give discomfort. For instance, in operating for appendicitis, practically the only structure which gives pain is the parietal peritoneum. One can stitch the bowel, and divide the appendix with the actual cautery without causing distress to the patient. When the blood vessels are clamped and tied there is always some pain unless a few drops of cocaine solution have been injected around them. If there are any adhesions it is always advisable to infiltrate them with some solution before separating them. In this way I operated on three cases through the grid-iron incision with very little discomfort to the patients. It is interesting to note that with the grid-iron incision, if the patient strains or coughs the fibres of the internal oblique and transversalis approximate themselves unless they have become paralyzed by too much retraction. The fibres of the tendon of the external oblique also come together, so that really there is almost no possibility of hernia forming. I have frequently seen Kocher stitch the peritoneum, and the fibres of the external oblique, leaving thus the deeper muscles without any sutures. When the muscles are brought together with sutures it is very important that these be not tied too

tightly, else the vitality of the individual fibres be destroyed, a mistake I have frequently seen operators make.

Local anesthesia is especially useful in gastro-enterostomy, and I prefer it to a general anesthetic. At times it is very difficult to empty the stomach before an operation of this character and several deaths have been reported where the patient has actually died on the table from drowning. This could scarcely occur when the patient has all his faculties.

It is in the neck, however, where local anesthesia is most useful. During the last three years I have done thirty-five partial thyreoidectomies in this way, and Kocher says that no operator is justified in operating on an exophthalmic case with a general anesthetic. He uses a one per cent. solution of cocaine. In these cases all forms of antiseptic solutions should be kept from coming in contact with the wound, in other words the operations should be conducted aseptically. It is astonishing to see the patient undergo a goitre operation with very little complaining. If, however, the gland has been treated with all forms of iodine and other stimulating ointments, or has been thoroughly treated with electricity, many adhesions are encountered which hamper the surgeon, and give pain to the patient. A little chloroform might be given under such circumstances. In only one of my goitre cases was any chloroform given, and had the father of the patient, who was a physician, not been present, I think we could have done very nicely without it. The patients complain chiefly of the dragging and choking sensation when the gland is being dislocated.

My goitre patients have been taken from all classes of society. Many of them were young, nervous girls, and one was a lady of fifty, with a large heart affected with valvular disease. Twice have two sisters been operated on, and it seems evident that if the pain, fright and shock were so great as Deaver and some others seem to think, one patient would not advise her sister to undergo such an ordeal.

One old gentleman, seventy-three years of age, referred to me by my friend Dr. Stuart, of Milton, had a very large growth in the left side of his neck, which interfered very much with his breathing and swallowing.

He had a hypertrophied prostate, cystitis, and had led a catheter life for some years. He had lost flesh, and looked very badly. He certainly was a poor subject for a general anesthetic. It appeared to me to be a malignant growth arising from the left half of the thyroid gland. The operation was done under cocaine. The tumor proved to be a sarcoma, arose from the

perichondrium on the left side of the thyroid cartilage. The sterno-hyoid and sterno-thyroid muscles on the left side, and also the left sterno-mastoid had to be divided transversely in order to remove the growth. The lower part of the pharynx was also cut into. During this long operation the patient complained very little except when the sterno-mastoid muscle was cut. He had very little shock. Two years later Dr. Stuart reported that the patient looked well, had gained in weight and there was no sign of a recurrence. It seems to me doubtful that the result would have been as favorable had a general anesthetic been given.

Local anesthesia is indicated in operations on the larynx. Kocher uses a solution recommended by Steins of Moscow, composed of five per cent. of cocaine and antipyrin, with one per cent. of carbolic acid, to paint the mucous membrane of the larynx and trachea. This controls the coughing. In a case operated on recently, for Dr. Crawford, of Hamilton, the right half of the larynx, on which was a small carcinomatous growth, was removed. Fifteen minutes before the operation one-fourth of a grain of morphia was given hypodermically, and a few inhalations of chloroform were administered during the operation, but not sufficient to cause unconsciousness, in fact, he began to struggle, and it was stopped. The patient suffered very little pain, and had I another case to do, I would not give any chloroform. One can easily understand the advantage of having the patient conscious during such an operation. A little morphia (one-eighth to one-quarter of a grain), has a beneficial effect in cases operated on with local anesthesia. It is also wise in certain cases to have the ears stopped with absorbent cotton, so as to mask the sounds of the instruments. It is essential also to have regular trained assistants, so that the necessary instruments are given without being asked for. The patient listens to all the conversation, and if he hears the surgeon ask for a knife or a scissors, he imagines he is going to be hurt. Some on the other hand, like to see what is being done, but this should rarely be allowed, and the patient's eyes should be covered or protected by a screen from the surgeon and the field of operation.

Young, of Baltimore, uses spinal anesthesia in certain of his prostatic cases, and speaks highly of it. He uses a third of a grain of cocaine dissolved in the spinal fluid. He cites Goodfellow as being the originator of this method, but I think the credit belongs rather to Tuffier. When in Paris last spring I noticed that Tuffier operated less frequently with spinal anesthesia than formerly. In a double hernia which I saw his first

assistant do, the patient seemed to suffer more than mine have done with local anesthesia.

Quite recently Sampson has used local anesthesia in operating on the lower end of the uterus, and speaks highly of the method.

During the last three years I have used local anesthesia in more than sixty major operations. The list includes, gastro-enterostomy, enterostomy, suprapubic cystotomy, colotomy, appendicitis, hernia, ileus, exploratory laparotomy, partial laryngectomy, goitres and tumors of the neck, and I feel certain that life has been saved in many cases by using this form of anesthesia.

LYMPHO-SARCOMA.*

By Beverley Milner, M.D., C.M.,

Surgeon to Hospital for Sick Children; Surgeon to Out-Door Department Toronto General Hospital.

Mr. President,—It is not my intention to take up any time by discussing the etiology of lympho-sarcoma. The different terms, such as adenia (Trousseau), lympho-sarcoma (Virchow), malignant lymphoma (Billroth), pseudo-leukemia (Cohnheim), and the more common term Hodgkin's disease, being used by different authorities to describe what is really one disease.

The mode of onset of lympho-sarcoma is so insidious that it is almost always fairly well advanced before it is discovered, there being no early symptoms to warn the patient of danger. The first thing to attract his attention being a glandular enlargement, which is most probably discovered by accident, the most likely situation being in the cervical region. In the early stage there is absolutely no other symptom, the patient feeling in the best of health. He may be more or less anemic, probably not sufficiently so to cause comment. On examining the tumor we find that it is quite hard, slightly moveable, and not very painful on pressure. The difficulty now will be to distinguish from tubercular glands, and the only sure method is with the aid of the microscope.

The treatment, heretofore, has been far from encouraging,

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our text-books giving us no light whatever. We are advised to completely remove the diseased glands, but if this is not practicable, to try phosphorus and arsenic, etc., and general toxic treatment, finally being given the comforting information that all medicinal measures are of no avail.

The treatment which I wish to bring before your notice today is that advocated by Dr. Morton, of New York, and which will be outlined during the recital of the history of a most interesting case which came under my care a few months ago.

Before going any further I wish to say that I believe in a radical operation in lympho-sarcoma if the disease is recognized early, otherwise by all means do not attempt it.

Notes from Case Book on Case of Lympho-Sarcoma.

Jan. 3rd, 1903.—Mr. H. P., age nineteen; family history good, save that one paternal aunt died of some form of malignant tumor.

Personal History.—Past: Never any illness save a mild attack of diphtheria several years ago. Present: Last week while dressing noticed a swelling above the left clavicle; no pain or any other symptom indicating its presence. On inspection a firm glandular enlargement was found in left supra-clavicular region. Tumor very firm, slightly moveable, only slightly painful on pressure, and about the size of an egg. Glands in neck and axilla normal. Patient's general appearance that of a well built, healthy young man, though somewhat pale, which he says (and was verified later by his parents), is his normal appearance. No cough; lungs, normal; heart, normal; urine, normal; bowels, regular.

Diagnosis.—Either tubercular glands or sarcoma. Advised immediate operation.

Jan. 7th, 1904.—Operated at Toronto General Hospital, assisted by Dr. Powell. Found a mass of glands which were firmly matted together, and which were removed, revealing another mass beneath the clavicle, also another mass in the mediastinal space. These were not interfered with as malignancy was suspected. Report of examination of glands by Dr. Anderson: Large round-cell sarcoma of lymph glands. Examination of blood at Toronto General Hospital: Normal, save that hemoglobin was only about 70 per cent. Wound healed nicely, stitches removed January 17th, 1904.

Jan. 21st.—Consulted with Dr. Coley at New York, diagnosis confirmed. Dr. Coley advised the use of Coley's toxins

and the X-ray, the former daily and the latter every other day. This was followed out as the following statement will show:

Jan. 24th.—Coley's fluid, two minims, by hypodermic, and X-ray, fifteen minutes.

Jan. 25th.—Coley's fluid, three minims.

Jan. 26th.—Coley's fluid, four minims.

Jan. 27th.—Coley's fluid, six minims; reaction; chill; temperature, 103; X-ray, fifteen minutes.

Jan. 28th.—Coley's fluid, six minims; slight reaction.

Jan. 29th.—Coley's fluid, seven minims; decided reaction; temperature 103 1-2; X-ray, fifteen minutes.

Jan. 30th.—Coley's fluid, six minims.

Jan. 31st.—Coley's fluid, seven minims; X-ray, fifteen minutes; tumor much softer.

Feb. 1st to 28th.—Coley's fluid given daily; reaching a maximum of 16 minims with a reaction about every third day; X-ray every alternate day. Original mass not getting any larger, but other glandular swelling appearing in the left cervical region.

March 1st to 31st.—Same treatment; glands in the right cervical region becoming involved; the X-ray reduces some of the enlargements, but has no effect on the original mass; the upper part of the left thorax is markedly dull on percussion.

April 1st to 30th.—Same treatment; reaction every third or fourth day; dulness in left thorax spreading; complains of restless nights, owing to profuse perspirations.

May 1st.—Glands in left axilla are becoming tender and enlarged.

May 5th.—Coley's fluid, fifteen minims; reaction; temperature, 104.

May 6th.—Coley's fluid, twelve minims; X-ray to all affected parts; glands in neck small and knotty; glands in axilla much enlarged and painful; complains of pain in arm when walking.

May 10th.—Treatment same; no change in axillary glands; left cervical markedly reduced; right cervical, chain of enlarged glands extending from below the ear to clavicle.

May 11th to 31st.—Treatment same; dulness in thorax extending; spleen markedly enlarged.

June 1st to 26th.—Treatment same (Coley's fluid every alternate day); extension is gradual; thoracic dulness more marked.

June 27th.—Discontinued Coley's toxins.

July 1st to Aug. 5th.—X-ray every alternate day. Condi-

tion about the same. Patient went to Muskoka for change Aug. 5th.

Aug. 25th.—Scarcely any noticeable change since Aug. 5th; cervical glands more enlarged; thorax about same condition.

Sept. 1st.—Resumed X-ray treatment; exposing each side of neck, thorax and axillæ. Thorax examined: Area of dulness much greater than a month ago. Heart: Apex displaced 3-4 inch to right. The whole left side is larger than right side, seemingly due to fat deposit; pulse, 98; respiration, 22; cough present at night.

Sept. 30th.—Result of the month's treatment not encouraging; gradual extension of disease; cough very troublesome; dyspnea at times distressing; heart's action increased; pulse 110; some difficulty in swallowing. Thorax, dulness over entire left side; respiratory sounds very faint; heart displaced 1 1-2 inches to right (at apex); X-ray burn on left side above the nipple.

Oct. 3rd.—X-ray discontinued for a few days to allow the burn to granulate.

Oct. 12.—Dr. Dickson examined patient, advising persistence with X-ray, as it appears to hold the growth in check.

Nov. 11th.—Visited Dr. Morton in New York regarding the use of X-ray with quinine fluorescence.

Nov. 19th.—Commenced treatment advised by Dr. Morton, giving fifteen grains of bisulphate of quinine an hour before X-ray exposure; exposure lasting forty-five minutes; patient three feet from tube, using a very high vacuum tube. Patient's condition at this stage could scarcely be any worse; dyspnea very distressing; coughs at every attempt at conversation; heart's action very weak and rapid; pulse, 130-135; thorax, complete dulness over whole left side; mucous rales in right bronchi; heart displaced at apex about three inches to right (this is what the apex beat would indicate); patient unable to lie down; general condition getting markedly worse; cervical and axillary glands much enlarged; pain in left arm very acute at times; spleen greatly enlarged, can be readily felt three inches below the last rib; mesenteric glands apparently not affected, nor are the inguinal glands; patient's weight, 124 pounds.

Dec. 1st.—No marked change.

Dec. 9th.—Patient says that last night was the first night for many weeks that he has had a good rest. No cough. Examined thorax: Undoubted improvement; axillary glands nearly normal; cervical glands much smaller; area of dulness about same.

Dec. 16th.—Improvement during the last week has been

most marked; heart displacement only 3-4 of an inch at apex; pulse, 88; respiration, 20; no dyspnea; cough entirely disappeared. Chest examination: Right side normal; left side, dulness not so marked, but still general. No enlarged glands, save in the left axilla, this part being protected from the ray on account of the burn, which is still troublesome.

Dec. 23rd.—Patient says he feels perfectly normal, except for the inconvenience of the X-ray burn. General condition good; weight, 135 pounds.

Jan. 1st, 1904.—Still improving; right side, normal; left side, respiratory sounds more distinct, especially in axillary line and behind; dulness not so marked save towards apex. Heart: Percussion not satisfactory on account of general dulness, but heart appears to be in normal position; pulse, 80; respiration, 20; no disagreeable symptoms whatever; patient says he feels quite normal.

Feb. 4th.—Stopped X-ray to-day for a week.

Feb. 9th.—No change. Ray burn seems to be healing; resumed treatment.

Feb. 18th.—Patient says he has "caught a cold." Has been sneezing; nasal discharge; had a chill last evening; complains of feeling chilly; frontal headache; limbs and backache, etc.

Feb. 18th.—Visited patient to-night; has all the symptoms of grippe; temperature, 102; pulse, 120. Examination of chest: Breathing a little harsh on the right side.

Feb. 19th to March 18th.—Patient rapidly developed a pericarditis with effusion; edema becoming general, especially over the back and abdomen and scrotum; very little in the lower extremities; no enlargement in cervical, axillary or the inguinal glands; heart weakness very marked; dyspnea very distressing. This persisted until March 18th, when the patient died.

It will readily be observed that in the case of this patient that Coley's toxin had no effect whatever on the disease, other than a possible softening of the original mass, and which was only temporary. It will also be observed that the X-ray as at first used had no effect, except on the superficial glands, and that it was impossible to keep pace with the rapid progress of the disease. Also we see the great danger of ray burn to the patient, especially when it is necessary to expose several parts during one treatment. One ray burn may be a very serious matter, and cause a delay possibly of weeks in the treatment, which is a very serious matter when we consider that success, if it is possible, depends upon the continuous treatment. With the aid of quinine fluorescence the great danger of ray burn is very slight

and it is possible to expose the patient to the influence of the ray every day, from forty-five minutes to an hour.

Quinine *per se* has no effect in this disease. It is solely on account of its fluorescent properties that it is useful in connection with the X-ray, which may be demonstrated by taking a solution of quinine bisulphate, say, one grain to the ounce, and place inside a fluoroscope which has been wrapped in several thicknesses of black paper, and exposing to the X-ray, when the bottle of quinine solution will be seen most distinctly fluorescing.

Quinine bisulphate is used in preference to the other salts of quinine, on account of its solubility, being soluble in one to twelve of cold water, while the sulphate is only soluble in one to seven hundred and forty cold water.

The quinine should be given in large doses, commencing at ten grains, increasing up to fifteen or twenty grains daily, an hour before exposure to the X-ray, and the treatment kept up daily.

The tube should be one of high vacuum. This is all important. A low tube will not give good results, according to Dr. Morton. By a high tube is meant one that will at least have resistance sufficient to back a six or eight-inch spark. The patient should be placed about three feet from the tube, and the exposure should last from thirty to forty-five minutes, or even one hour, according to the severity of the case, the patient being turned from time to time, so that all the affected parts may be exposed. This treatment should be persisted in as long as good results are obtained.

As to just what tissue change takes place I am not prepared to state. In some situations a decided softening occurs, the enlarged glands becoming normal so far as one can judge, while in others the enlarged glands shrink and become quite fibrous. This corresponds to the theory of some authorities, that a fatty degeneration ensues in some cases, while a change to fibrous tissue occurs in others. I am sorry that I was unable to obtain a post-mortem examination in this case, and thereby determine what changes actually did take place, yet I am convinced that great good may come from the use, especially the early use, of quinine fluorescence in all cases of sarcoma, but on the other hand, unless used properly and with a powerful X-ray apparatus, using a high vacuum tube, anything but good results may ensue.

CASE OF HYSTERECTOMY FOR FIBROID TUMOR OF THE UTERUS: RECOVERY.*

By A. Lapthorn-Smith, M.D.,
Surgeon-in-Chief Samaritan Hospital for Women, Montreal.

Mrs. ——, — years of age, consulted me at the Montreal Dispensary for an enlargement of the uterus, which she had noticed only about three months ago. She was a very ill-looking woman. Her skin was sallow, her eyes sunken, her cheeks hollow. She had a heart murmur, a very weak pulse, generally emaciated, albumen in the urine. Altogether she was in such poor condition that when I sent her into the Western Hospital, for removal of the uterus by abdominal section, my house-surgeon telephoned me to come and see her again, as he hardly thought she would stand an anesthetic.

Nevertheless, I decided to operate, for she was having profuse menstruation for the last five years, lasting five days every month, and I felt sure that bad and all as her condition was, it would certainly not be better until the cause of the trouble was removed.

Like other gynecologists who have watched the course of a large number of fibroid tumors, my opinion as to the harmlessness of these tumors has undergone a great change during the last ten years. Formerly we never thought of removing them until they had attained a very large size, and even then we were inclined to delay operative interference from year to year and depend upon medical or electrical treatment, in the hope either of diminishing the hemorrhage or arresting the growth of the tumor, or even of carrying the patient along until the menopause should arrive; but after a time we found that the menopause did not come on at the usual period, but kept up for five, ten, or even fifteen years longer—if the woman lived that long. Moreover, we found that many of the women who had fibroid tumors, even after the flow had stopped, continued to fail in health, generally dying in ten to twenty years before their time from disease of the kidneys, due to pressure of the tumor on the ureters, or from constipation and indigestion, owing either to pressure on the stomach and intestines, or, perhaps, by reflex action, due to irritation of the great sympathetic nerve. Others died from dilatation of the heart, due to defective nutrition, causing dilatation and then failure of the valves to meet, so that the blood regurgitated into the lungs and venous

*Read before the Medico-Chirurgical Society of Montreal, March 24th, 1905.

system. Then, again, in quite a number of cases, we found that a tumor which at thirty was distinctly fibroid, and presented no evidence of malignity, became transformed at forty to fifty into a distinctly malignant growth, very often breaking down in the centre, suppurating, and causing septic infection. The writer has seen one or more of all these accidents occurring among the two hundred and odd cases of fibroid tumor which have passed through his hands, so that he now looks upon a fibroid tumor the size of a fetal head not merely as a solid tumor of that size, but as an object with immense possibilities, far beyond its size, for endangering the life of its possessor; and he now feels it his duty to urge his medical friends to look for these cases, by examining every patient with any of the above-mentioned symptoms, and if any decided enlargement of the uterus is found, not due to pregnancy, to have her case further investigated, so that if a fibroid tumor, even the size of an orange, is discovered, steps may be at once taken to enucleate it if it is subperitoneal or submucus, or to remove the uterus with the ovaries and tubes without delay if it is interstitial.

This brings up another point for consideration: Why not leave the tubes and ovaries? The answer is very simple. Careful examination of these organs in many hundreds of cases after the uterus had been removed for fibroid tumors has shown, almost without exception, that the ovaries and tubes were diseased; in many of them there being dense adhesions, while in others there have been hydrosalpynx, pyosalpynx, ovarian cysts, etc., so that on account of the ovaries and tubes alone, one is, in most cases, justified in operating.

Another great advantage in earlier operating is the almost total absence of mortality, if the uterus is removed before it has attained the size of a cocoanut, and the arteries can be tied so effectually, before being cut, that the operation is practically a bloodless one, only from one-half to two ounces of blood being lost from the patient. Secondly, the operation is very quick, twenty to thirty minutes sufficing in an ordinary case, if one has good assistants; and it is well known that the mortality runs pretty closely in proportion to the number of minutes during which the patient is under the anesthetic. The general practitioner who discovers a fibroid tumor early, and urges its immediate removal before it has become adherent to the surrounding organs, and before it has had time to exhaust the woman by a hemorrhage, or to ruin her kidneys, thereby renders the mortality of the operation almost nil, while if the tumor is allowed to grow large and the patient to run down, a longer time will be required for its removal, and the risk of anesthesia will be much greater; also there will be more hemorrhage, so that a small death-rate will be impossible, even for the best operator.

But in the patient of whom I am speaking to-day the cervix was long and hard, and as she was exceedingly emaciated I had no difficulty in feeling the uterus very plainly, and there was no sign of there being a sac full of water, as is the case in pregnancy, the whole mass being densely and tensely elastic.

After several hot baths and the preparation of the bowels, her abdomen was opened by a single stroke of the knife, the tumor seized and drawn out, and the three arteries on each side quickly tied. The anterior and posterior flaps of peritoneum were dissected off; after which the cervix was hollowed out, so as to give two flaps, which could easily be brought together, and then the peritoneum was closed by one single running catgut suture, going through the left ovarian artery and ending at the right one.

The operation lasted about half an hour, and as the patient had lost no blood, and as her bowels were not seen at any time during the operation, she went off the table with a pulse of eighty and without any fall in temperature. She made a rapid recovery.

I have seen many of these women a year or two later, looking so robust in health that I scarcely recognised them, and all perfectly certain that they would choose the same treatment, viz., removal of the tumor, if they had to go through it again.

After the tumor was removed, I cut it in two, and tried to enucleate some of the growths. This could be done to some extent, but it left a ragged shell of an uterus, which it would have been impossible to bring together so as to avoid a collection of serum.

I might add that the danger of the operation by our present methods is almost nil. I had a run of twenty cases a few years ago, and only lost the twenty-first one because she was sixty-five years of age and had a cerebral hemorrhage during the operation, for she was paralyzed when she regained consciousness, and remained so until she died, more than two weeks later. This case now reported is the twentieth since then without a death.

248 Bishop Street, Montreal.

Selected Article.

WESTERN CANADA'S HOSPITALS.

In our October issue (*Resources*, Montreal) we attempted, in the article "The Weather of the West," to give to the growing public interested in the North-West Territories some definite idea of the climatic conditions there. Almost the first point upon which an intending settler wishes to satisfy himself is whether the prospective land of his adoption has a healthy climate. To the man who has satisfied himself that in Assiniboia, Alberta and Saskatchewan not only are the weather conditions admirably adapted to wheat-growing, ranching and mixed farming, but equally enjoyable to the human beings engaged in these occupations, we would now present some facts as to another very vital point, viz., the hospital accommodation in the land wherein he contemplates making his new home. If the Canadians of Ontario and Quebec are themselves very hazy about what the Far West provides to-day of such necessities of life as good hospitals, it is not to be wondered at that the minds of people from afar off are almost a complete blank on this question. From letters received by our Bureau of Information during the past months, it is clear that many would-be emigrants are not aware that there are such things as hospitals in the West at all. Even the best-informed of them have little idea of what splendid efforts have been made by these newly-settled provinces, which yesterday were almost wild prairie, to provide for the care of the sick and injured. There is no feature of life in these great new lands which more astonishes the visitor than the hospital accommodation already provided there. In a country where most of the people are poor and busy providing homes for themselves, where many articles are dear and money badly wanted for material development, it is a stimulating sight to find neat cottage hospitals, the tangible result of the generosity and self-sacrifice of the residents, where everything that care and kindness can do for the ailing is to be found, and where, despite the lack of expensive apparatus, splendid work is being done by men and women who have few opportunities for study and practice.

In the annual report of the Department of Agriculture of the North-West Territories for 1903, there is, under the heading Public Health, a very interesting report of the Inspector of Territorial Hospitals, Dr. Kennedy. In his general remarks, after commenting upon the need for increased accommodation to meet the very

large influx of population which the Territories are now receiving, he says: "To afford some idea of what the people of the Territories have done, I may state that there are now twelve public hospitals in the country and two more in process of erection, while in the rich and populous Province of Ontario, in 1881, there were only eleven of these institutions, and in 1891 but twenty-one. And it is the people themselves who have done this work, for the help they have received from outside is but a drop in the bucket."

A few quotations from the report of Dr. Kennedy will give a "live" idea of what these hospitals are like. He visited the Galt Hospital in Lethbridge, one of the most promising little cities in Western Canada, on March 15th. This hospital was founded by Sir Alexander Galt, primarily to afford facilities for the employees of the Alberta Railway and Coal Company, but it has always received patients from the general public. "There were seventeen patients in the institution," writes Dr. Kennedy, "and it is interesting to note that of this number fourteen were surgical cases, thus confirming a remark of mine in a previous report, that probably more surgical work is done in this hospital than any of the Territories. . . . . The hospital itself was scrupulously neat and clean, the patients appeared to be well-looked after, and there were no complaints. It is exceedingly well-equipped and is doing excellent work, patients coming from other parts of the Territories and from British Columbia. Since my last report an X-ray machine has been installed, thereby adding very much to the facilities for doing good work. It is the only hospital in the Territories that can boast of this feature." (This, it must be remembered, was written two years ago.—EDITOR.) "It also has a first-class modern ambulance, which was secured at a cost of $500, and which has unquestionably alleviated a lot of suffering among the large number of accident and surgical cases which are brought to this hospital."

Of the Queen Victoria Cottage Hospital, Yorkton, Dr. Kennedy writes, after visiting it within a few months of its opening: "The town of Yorkton has a population of about 1,000. There are about 6,000 each of Gallicians and Doukobors in the neighborhood, and these, with a large number of American, English and Canadian settlers, makes a population of about 20,000 in the country which is tributary to the hospital. The building itself is a very substantial and attractive one, standing on its own grounds of three acres, on an eminence to the south-west of the town. It is on a stone foundation, is built partly of brick and partly of wood, has two stories and a basement, and at present accommodates sixteen patients—public and private. . . . It has a very good operating room, which, for one in use so short a time, is exceedingly well equipped. The hospital was erected at a total cost of $5,380, including $100 for the land which it occupies and with the furnish-

ings, etc. The total assets at the end of 1902 were $8,661. I may say, that in spite of some defects, the general plan of the hospital building has so commended itself to me that I have written to Ottawa for a plan of it, and I think that with a few changes it would serve as an excellent model for small hospitals which are being built throughout the Territories. . . . . At the date of my inspection I found everything neat and clean and in good order about the hospital, in spite of the fact that there had been some difficulties in obtaining sufficient assistance in the domestic part of the staff. The staff consists of the matron and a probationer, besides the cook, who also acts as a general servant. . . . The hospital had been in operation for exactly five months, and during that time had cared for 41 patients, the aggregate number of hospital days being 525. Of these every one had been paid for, excepting 13 days owing by one patient, and for this the directors held the patient's note, which they expected to realize."

The oldest institution in the Territories, the Medicine Hat General Hospital, was visited in March also. There were twenty-five patients when the inspector called, and after giving particulars of four incurables being treated, he writes: "A pleasing and noticeable feature of hospital work here is the extent to which advantage is taken of the maternity cottage, there being, as noted before, no less than five patients and one baby occupying the building on the date of my visit. I am satisfied that this factor in connection with the hospitals of the Territories is a means of saving life and much needless suffering, and it is encouraging to note that the people are becoming educated to the advantages offered by maternity wards."

The staff consisted of a medical superintendent, a lady superintendent, first assistant and eight nurses in process of training—this, be it remembered, in a little town of (at that date) about 2,000 inhabitants.

There are two hospitals at Calgary—the General and the Holy Cross. The General Hospital was found to be filled to overflowing, there being 31 patients in the institution. The patients were distributed as follows: Men's general ward, 15; women's ward, 3; men's private ward, 2; women's private ward, 4; isolated ward, 1; the rest being maternity cases in the maternity hospital, which is a separate building. "I found the Calgary General Hospital," says Dr. Kennedy, "as usual, neat and clean, and the patients were all fit subjects for hospital treatment, and there were no complaints." The staff then consisted of the matron, one graduate, eight nurses in training and three probationers. An idea of the work done by this hospital can be gathered from the following statistics for 1902: Total number of hospital days, 8,136; total number of patients registered, 542, of which there were in the private ward, 149; maternity, 48; isolated, 67; besides 409 out-door patients.

Regarding the Holy Cross Hospital, Calgary, Dr. Kennedy writes as follows: "I visited and inspected this hospital on Tuesday, 31st March. Since my last visit the hospital has been enlarged by the addition of a wing, 35 ft. by 24 ft., four stories high, built of brick with stone basement, and giving additional accommodation in the shape of a general ward, and an isolated ward in the basement. Notwithstanding the increased accommodation, I found that the hospital had been taxed to its capacity during nearly the whole winter. It provides at present accommodation for 47 patients, distributed as follows: Male patients, private, semi-private and public wards, 24; women patients, 11; isolated cases, 12. The isolated wards have been used for infectious diseases, as scarlet fever, of which there has been rather an epidemic in Calgary during the past autumn and winter. As a consequence of the increased accommodation offered by the new wing, the old isolated wards at the top of the building, which were so objectionable, and which I reported against on a previous occasion, have been done away with, and, after being thoroughly cleansed and renovated, are now used as part of the general hospital. The new isolated wards, while still leaving something to be desired, are a great improvement upon the old and it is now possible to treat cases of an infectious nature there without entering the part of the building devoted to general purposes, and without any danger to other patients. I might point out, however, that it is not desirable that any infectious diseases, such as scarlet fever, measles, diphtheria, and so on, should be treated at any general hospital, and isolated wards should only be for the purpose of receiving infectious cases occurring in the hospital itself.

Of the 499 patients registered during 1902, 23 per cent. were free patients, 8 per cent. paid in part, and the remainder paid in full.

Edmonton, like Calgary, has two hospitals, the General and the Public. Each of these hospitals has been taxed to receive all the patients desiring admission. But at Strathcona, just across the river, the inhabitants were then contemplating building another hospital, to cost $10,000. Whilst finding some minor fault with the way the register was kept at the General Hospital, the inspector said that the wards as usual were clean and well kept, and that there were no complaints. The same praise was given to the Public Hospital.

We have not space for any further quotations from this interesting report, but sufficient have, we think, been given to show that a most praiseworthy effort has been made by the settlers in this new country to provide hospital accommodation for the growing population. "Quite likely," writes Dr. Kennedy, "this work has been augmented though the efforts of the Lady Minto Cottage Hospital Fund, and it is to be sincerely hoped that the controllers of this fund will see their way clear to still further enlarge the scope of their benefactions.

Clinical Department.

An Unusual Case of Mammary Cancer. HOWARD CRUTCHER, M.D., of Chicago, in *American Medicine.*

The patient, aged 60, is a woman of remarkable vigor of mind and body, and the mother of two healthy daughters. Fifteen years ago she first noticed a small lump in the upper and outer quadrant of the right breast. Her husband, a medical practitioner of large general experience, opposed all mechanical interference, and the condition was permitted to drift along with internal treatment. The lump grew slowly, and in 1898, broke into an open sore. Examination showed a deep cavity with angry edges and a mass of very dark tissue at the bottom. The entire gland appeared to be firmly attached to the chest wall. The husband asked me to scrape out the cavity as best I could, but gave positive orders that I was under no circumstances to attempt the removal of the mass. Indeed, such an attempt was foredoomed to failure. In June, 1899, I scraped out the cavity with a sharp spoon, applied the usual antiseptic dressings, and left the case to its fate. This surgical makeshift was followed by certain local applications, the nature of which I am unable to state. The cavity healed within a few months, and I heard nothing of the patient until December, 1904, when the reappearance of a small cavity, accompanied by violent pain, caused me to etherize the patient and remove with the knife about two ounces of the tissue that appeared to be most seriously at fault. Relief from pain was immediate, granulation was prompt, and the patient is now sojourning on the Pacific coast. She expresses herself as feeling perfectly well. It is worthy of note that at no time have the axillary glands been in the slightest degree involved, so far as thorough palpation could determine.

The specimen removed last December was submitted to Dr. W. A. Evans, who pronounced it scirrhus. Within a year this woman has lost a sister through mammary cancer, which ran a more typic course, ending life within three years. It was never treated surgically, but was looked after by soothsayers, mind readers, and a peculiar class of internists whose presence among us is a singular commentary upon the boasted enlightenment of the age in which we live.

The lesson to be drawn from the foregoing case is that palliative surgery is often practicable and helpful when ideal practice cannot for one reason or another be applied.

A Case of Cystic Goitre. NATHAN JACOBSON, M.D., Syracuse, N.Y., Professor of Clinical Surgery in the College of Medicine, Syracuse University: Surgeon to St. Joseph's Hospital, in *Buffalo Medical Journal.*

I desire to occupy but a few minutes of your time in the presentation of the history of a case of cystic goitre:

The patient, a boy of 18, who was attending school, was brought to me on the 22nd of March, 1904, by his physician, Dr. Kaple, of Elbridge. His father came with him also. The boy had had measles and whooping cough, but otherwise had been free from the diseases of early life nor had he ever been seriously sick. When but eight years of age his neck began to enlarge in the median line and the growth had steadily increased in size since that time. During the past two years the increase had been greater than during the preceding eight; and in fact during the past six months it had been particularly rapid. He suffered no great distress in breathing except when his head was carried well backwards.

Examination showed the presence of a smooth tumor with an irregular surface which was elastic and in which fluctuation could be made out. The mass was placed largely to the right side of the median line. At its most prominent part the circumference of the neck was seventeen and one-half inches. With a hypodermic syringe introduced into the tumor some bloody fluid was withdrawn. The diagnosis of cystic goitre was made and radical operation advised.

An interesting point in the history of the case was the fact that the boy's father had a goitre, apparently of the adenomatous type. These were the only two instances in the family.

The patient did not consent to operation until April 26th, 1904. On the preceding day he was admitted into St. Joseph's Hospital, Syracuse. There was an apparent increase in the tumor during the five weeks which had intervened. I was assisted in the operation by Dr. Coon and the hospital internes. A curvilinear incision was made beginning at the angle of the jaw on the right side and ending over the sternal notch. This was deepened through the superficial muscular structures overlaying the tumor. The sternomastoid was pushed back. The outer border of the sternohyoid was cut through. A number of greatly enlarged veins, some of them with a diameter of one-quarter of an inch, were doubly ligated and severed between the ligatures. All bleeding was controlled and the cysts were then shelled out separately with the handle of a knife or the finger. Most of them presented no difficulty in their enucleation. The deepest one was firmly attached to the right lobe of the thyroid gland and with it a part of the gland was removed. The right recurrent laryngeal nerve could be

readily recognised and injury to it was, therefore, easily avoided. About thirty vessels were ligatured. All of the cysts were removed intact with a single exception and this, though ruptured, was entirely enucleated. Three strips of folded gauze one-half inch in width were packed in the resulting cavity. The wound was closed with interrupted silkworm-gut sutures.

Throughout the operation the head was steadied by an assistant so as to secure it in a position in which respiration could be least disturbed. Chloroform was the anesthetic used. The patient bore the operation well.

In the subsequent history there was nothing particularly disturbing. Twenty-four hours after the operation the pulse, which had been below 100, rose to 120 and on the second day to 150. During this period there was an increase in the temperature to 102°. May 1, five days after operation, the temperature dropped to 99° and the pulse ranged from 90 to 100. He had some difficulty in swallowing and was unable to move his head from side to side. By the fifth day after the operation this also had cleared up and from this time on he had but little discomfort. There was from the very start a large amount of serous discharge which steadily decreased in quantity. On May 11th he was able to be up and on the 14th returned to his home, having been in the hospital nineteen days. The boy has remained in perfect health since his return home. I present to you the cysts which were removed. You will note that there are eight in number. They vary in circumference from two inches to seven and one-half inches and in diameter from three-fourths of an inch to two and one-half inches.

While it has been my privilege to operate upon a number of cases of cystic goitre, the one presented for your consideration contained the largest number of cysts I have ever removed from a neck.

It seems to me that the case has a number of interesting features associated with it. Diseases of the thyroid gland much more frequently affect women than men. To encounter, therefore, a family in which only the males are affected is certainly unusual. What to me seems quite as rare is the appearance of this disease so early in life, beginning as it did with our patient when he was but eight years of age. There is no doubt whatsoever that these are true cysts of the thyroid gland. In my experience also, single cysts of the thyroid are much more frequent than multiple ones. In our patient the mass, because of its size, did not move upwards and downwards with the act of deglutition. With the aid of a hypodermic syringe there was no difficulty in establishing the diagnosis.

There may be some difference as to the best method of treating a single cyst, especially where the walls thereof are calcareous and

fixed and where the enucleation of it would be very difficult and perhaps attended with great danger. Such a case might possibly do better with incision and drainage. But where enucleation is possible and especially where one has to deal with multiple tumors, nothing but complete enucleation is to be considered. With care as to hemorrhage and avoiding unnecessary traction so as not to produce kinking of the trachea, these operations are attended with an exceedingly low mortality. Our patient, despite the size of the tumor, presented no special difficulty in the way of anesthesia. While there is a growing preference for local anesthesia in these cases, I have always obtained good results with chloroform as the anesthetic. The advantage of absolute quiet on the part of the patient, which can only be obtained with general anesthesia, is apparent. It is admitted that cocaine does not absolutely control the pain and it surely does not overcome the anxiety and nervousness of the patient. As to the safety of chloroform in operations for goitre, it is only necessary to remind you that Kocher has used it in 900 cases without a death. The febrile disturbance and tachycardia which were present after operation, are encountered in practically all of the cases of goitre as a post-operative manifestation.

Some Unique Cases of Amblyopia. Dr. T. W. Moore, Huntington, West Va., in *The American Journal of Ophthalmology.*

At the time I selected this subject, I did so to report three cases of transient amblyopia without fundus changes occurring in children between the ages of ten and eighteen, presenting no special features of nervous debility and without neurotic family histories.

Since that time Dr. L. Webster Fox has reported several cases of the same type under the title "Anesthesia of the Retina," in a paper read before the ophthalmological section of the American Medical Association. His patients were all young girls, who were healthy and all were cured after a few applications of the constant electrical current.

Case 1 of my series came to me in March, 1903, complaining of having suddenly lost her vision, being unable to see either far or near, and having been compelled to give up her schoolwork on this account. I found a healthy, active, full-blooded girl, aged eleven years. Pupils reacted normally, vision in each eye = 10/200, accepting no lenses. Under atropine, vision remained the same, but with a + .50 ⌒ +.50 cyl. ax. 90° over each eye she read 20/80. Her field for white was contracted in all directions as it was for colors, the normal relationship being retained; a second examination at this time remained practically the same. The media and fundus were normal in both eyes.

I gave strychnia, and iodide of sodium, with instructions for patient to return in three weeks. I received word that she was much better, but did not see her again until December, when I found her condition practically unchanged. This continued until after my return from the meeting of the American Medical Association, when I began using the galvanic current for five or six minutes daily, the sponge electrode being moved across the forehead and over the closed lids and temples. Her vision when I began treatment was R. E. 10/150; L. E. 5/150, she being unable to read 11 Jaeger near. I tested her with different cards at different distances and obtained always the same results, although she did at times complain of being unable to see anything, but after a few minutes' rest she would read the letters to the limit of her vision. On June 23rd, 1904, after using the current five minutes, vision improved from 14/200 in R. E. to 20/200; in L. E. from 7/200 to 10/120 On June 24th, after using the current five minutes the vision was the same as the day before. On June 25th, after using the current five minutes vision = 20/80 with both eyes. Patient was taken to the country on this date, returning on the 30th, when after using the current five minutes she read 15/50 with both eyes. On July 2nd, after six minutes' treatment she read 15/20 with both eyes; on the 5th 15/15, on the 7th 15/15+, reading Jaeger 1 at twelve inches. Fields normal. Repeated measurements of the field of vision showed that there was an increase in all directions as the vision improved, the field for red increasing also but retaining its normal relation in the left eye, but in the right eye the field was never as much contracted as in the left, retaining almost its normal size at all times.

CASE 2.—S. P., school girl, aged 17, came to me in January, 1903. Vision, R. E. 20/200; L. E. 20/120, unimproved by glasses. Retinoscopy showed the refraction to be +.50 sp. R. E.; + .25 sp. L. E. Patient went to the springs and returned with vision, R. E. 20/120; L. E. 20/40, this was eight months later. One month later with + .50 vision = 20/30 in each eye. There was at no time any abnormality in the media, the only symptoms being failure of vision, sensitiveness to light and the contracted fields.

This case was of especial interest to me because a brother six years before had been examined by a well-known ophthalmologist, who made a diagnosis of disease of the optic nerve that would lead to total blindness in a short time, and to my knowledge the patient had to be led about for several months, and was finally cured by "blood medicine" compounded by an uncle who calls himself an eclectic.

Case 3 was a boy aged ten, inclined to be nervous, without any special manifestations. Parents healthy, as are his brothers and sisters. No headache, vision suddenly failed so that he was unable to study, vision = 20/40 unimproved in both eyes when first seen,

June 7th, 1902. A few weeks later his vision was 20/20 both eyes —three letters. On August 21st, it was 20/60 both eyes, nine days later it was 20/30? both eyes. One year later he was no better. His fields were contracted when the vision was bad, the normal color relationship being maintained and normal when he read 20/20. Ophthalmoscopic findings were at all times normal.

Heretofore, gentlemen, it has been the custom of ophthalmologists to classify these cases as belonging to that symptom complex "hysterical amblyopia," and as that term has been used to designate every visual defect that could not be explained by pathological findings—I suppose that it is the correct one—and further it lessens the shock to our sensibilities by having it gradually dawn upon us "that there is something wrong and we do not know what it is."

I wish to emphasize a few points in my cases in which they differed from the usual hysterical manifestations.

First, the fields for white in these cases have varied with the visual acuity instead of being contracted disproportionately, and the color limits have retained their normal relationship instead of being reversed as they so frequently are in the neurasthenic types.

My cases, as well as those reported by Dr. Fox, all occurred between the ages of ten and eighteen years—the ages when hysterical symptoms are most prone to manifest themselves, and whilst all of his and two of my cases were in females, it is known that the members of that sex do apply themselves to their books more assiduously than their brothers.

Hysteria is so frequently monocular; in these cases both eyes were involved and to almost the same degree.

I made very careful tests in case one to determine as to the counter field described by Wilbrand and found it absent, and further the fact that my cases and those of Fox occurred in young subjects and not in hysterical women with ovarian and uterine disorders, as he states his cases were most frequently found.

If neurasthenia is abnormal susceptibility of the system to fatigue from mental or bodily exertion, this broad term may express the origin of this condition which I believe to be an arrest of the functional activity of certain retinal cells occurring at or about the time of puberty, when the entire nervous system is at high tension and when with our forcing system of education the eyes are apt to be overworked, more particularly in those subjects who have slight refractive errors for the reason that they receive no warning in the way of headaches, etc.

The remedy for this, from Fox's report and my experience with the one case, after other measures had failed, is the constant current, which seems to stimulate these torpid cells into renewed activity.

I do not think that retinal anesthesia is a good term, owing to

its use by different authors for varying conditions, none of which were in accord with the symptoms here described; retinal torpor might be a better one.

A Case of Rupture of the Bladder in a Young Child. JOHN CROPPER, M.D., Cantab, in *The Lancet.*

On September 26th, 1904, a fellah boy, aged four years, fell from a flat roof twelve feet high on to his stomach, striking a coping of stone. He suffered great pain, but when he was brought to me soon afterwards I could discover nothing beyond some bruising, especially on the left side of the abdomen. I was told later that he had voided urine the same evening. The next day the pain was worse with great distension of the abdomen and on my return in the evening I passed a No. 1 indiarubber catheter, drawing off less than half a pint of bloody urine at the patient's home, the catheter being left in position. The distension was considerably relieved and the bowels were opened. His pulse rate was 150 and his temperature was slightly raised.

I explained the condition of affairs to the parents, telling them that the bladder was certainly ruptured and that an operation was urgently required. On consultation with friends they refused either to have an operation performed or to allow the child to be taken into the hospital in Jerusalem. On the next day (September 28th) he had slept and was much relieved; his bowels had been moved twice and he had passed urine twice; his temperature was 100° F. On the 29th the distension had increased and the motions were foul and light colored. Five ounces of clear urine were passed but the child looked worse; his temperature was 99° and his pulse rate was 150. Seeing his condition and knowing that he had little chance of recovery the parents, convinced also by some very plain speaking on my part, consented to an operation, which was accordingly performed under ether on the afternoon of the same day. Before the operation the patient had a very bad ashy-grey color; his abdomen was tympanitic in the upper half, while the lower half was dull and firmly resistant, especially during the anesthesia. An incision was made from below the umbilicus almost to the pubes. On reaching the peritoneum the bowel was found to be firmly adherent to it, but on separating the adhesions above the pubes much bloody urine at once welled up, the finger passing into a wide space bounded on either side by Poupart's ligament, which was very plainly felt. At the bottom of this cavity the bladder could be felt. The rupture in it was of course intraperitoneal, to the right of the apex, and admitted two fingers easily. Owing to the thickness of the abdominal wall (at least one inch of fat) and the length of time (three days) which

had elapsed since the accident I considered that any attempt to close the bladder was out of the question. Certainly in the event of want of union the bladder sutures would have complicated matters and probably led to a fatal result. Accordingly I passed a drainage-tube down to the bladder and packed the wound with gauze, leaving it otherwise widely open. The pulse rate after the operation was 180. The patient slept well. Next day he was in very fair condition and enjoyed the ride of ten miles into Jerusalem to the Hospital of the London Jews' Society, proper nursing being impossible in his own home. For the first few days there was a good deal of offensively smelling discharge with the urine which drained away freely. On using a considerably stronger lotion than had been used at first—namely, a solution of perchloride of mercury of strength 1 in 2,000 syringed through a catheter passed by the penis twice daily—the condition of things rapidly improved, and beyond a little silver nitrate solution (of strength 20 grains in an ounce) painted on the wound there was nothing to note in the treatment. In spite of a smart attack of remittent fever with splenic enlargement the wound was firmly closed on November 5th. The only trouble after this was incontinence of urine, which persisted for some days. The patient was discharged from the hospital in very good condition four or five weeks later.

In conclusion, it may be remarked that in native villages in this country almost the only accidents to children arise from falls from the flat roofs, which are quite unprotected. In this case, as already stated, the child fell fully twelve feet.

Orthoform in the Diagnosis of Gastric Ulcer. Frank H. Murdoch, M.D., of Pittsburg, Pa., in *American Medicine.*

In a note at the end of an article published in the *Medical Record* for December 31st, 1904, by Dr. Beverly Robinson, entitled "Problems Relating to Simple Ulcer of the Stomach," he says, Dr. F. H. Murdoch's latest report regarding "Orthoform in the Diagnosis of Gastric Ulcer" is interesting and important. Then he quotes me quite correctly as follows: "As this remedy will not anesthetize nerve-endings when they are protected by skin or mucous membrane, it is certain that if it relieves pain in the stomach it can do so only by coming in contact with a surface from which the mucous membrane has been removed."

My own experience," he says, "as reported in my paper, has not confirmed such an absolute judgment, nor does it wholly coincide with the experience of others. Orthoform does not invariably relieve ulcer of the stomach when the diagnosis is rea-

sonably sure." Now in cases of gastric ulcer where the diagnosis is reasonably sure, it is very seldom necessary to give orthoform at all. I have seen only one case in which attacks of severe gastralgia came on after the patient had been put to bed and restricted to liquid food. The first attack was relieved by a hypodermic injection of morphine which did not prove anything; the second attack was promptly relieved by orthoform given by the mouth, which proved two things: 1. That there was an open ulcer in the stomach. 2. That the ulcer was the cause of the gastralgia. My claim for orthoform in gastric ulcer is simply this: Given a patient suffering from a sudden, severe pain in the epigastrium, and if the pain entirely disappears in twenty or thirty minutes after the administration of orthoform, we may be certain that the patient was suffering from gastralgia the result of ulcer of the stomach; for orthoform will not relieve pain in the epigastrium when produced from any other cause whatever. In regard to the experience which others have had with orthoform in gastric ulcer, Hemmeter says: "There is another point of value in making a differential diagnosis. It has always been considered desirable to possess a substance which would relieve gastric pain if applied locally in patients afflicted with gastric ulcer. For this purpose I have administered orthoform. If orthoform is given in cholelithiasis the pain will not cease; but if given in a case of gastric ulcer it will cease promptly, especially if an alkali be combined with it."

The alkali however is, I think, superfluous. I have always given plain orthoform, and have never seen it fail to relieve gastralgia promptly, no matter how severe, if caused by chronic ulcer of the stomach.

A New Method of Accurately Examining the Hymen in Medico-Legal Cases. J. Livingston Loudon, M.D., Glasgow, D.P.H., in *The Lancet*

In all cases of alleged rape it is of the utmost importance that the condition of the hymen should be ascertained and if it has sustained any injury the full extent, nature, and position of it accurately estimated. Of course, it is only in cases where the victim has up to the time of assault been a virgin that the hymen will most likely show traces of injury and the younger the woman the more difficulty there is in making an examination which is at the same time painless and yet thorough.

The following method of thoroughly exposing the hymen I have frequently found most effectual ; it is, moreover, simple, easily managed, and, if done carefully, painless. The patient being in the lithotomy position and swabs from the vagina (for examination for semen) having been taken, the parts are freely treated with a 20 per cent. solution of cocaine, possible toxic effects where there are large raw surfaces being kept in mind. An ordinary soft red rubber catheter is then taken and over its point for about one inch or one and a half inches there is placed an ordinary india-rubber condom which is tightly bound into the stem of the catheter by a few turns of thread. There is thus improvised an instrument closely resembling one which used to be employed for arresting hemorrhage in cases of epistaxis, the armed catheter being placed in the nose and the point inflated, and so caused either to press on the bleeding point or plug the nostrils. This arrangement is gently passed into the vagina; the point is then expanded either by inflation or by injecting a small quantity of warm water; this done the catheter is clamped. There now is inside the hymen what may be termed a miniature Champetier de Ribes bag and by making *very gentle* traction on the catheter the hymen is put slightly on the stretch and bulged from within. In this way the whole hymeneal margin is fully exposed to view, so that any interruption in its integrity is at once detected, however, slight it may be. In very young girls this method will be found particularly useful, as the hymen is very inaccessible then.

Therapeutics.

Hydrogen Dioxid in Dyspepsia.

Gallois and Courcoux of Paris have been studying the action of hydrogen dioxid on the digestion, experimenting on dogs with a Pawlow fistula. They claim that it has a pronounced effect in increasing the amount of gastric juice secreted and the proportion of free hydrochloric acid, thus secondarily enhancing the digestive power of the gastric juice, the proportion of pepsin being always higher than under other conditions. Clinical experience also showed that it arrested the vomiting of pregnancy, the effects not being apparent at once, but suggesting that it removed the cause. This seemed to be the case also in certain gastro-intestinal troubles, especially hypopepsia and diarrhea. At it combines the properties of promoting digestion and disinfecting the bowels, it is thus especially indicated in hypopeptic dyspepsia with abnormal fermentation, and is particularly useful for infants. The results seem to be better the more recent the onset of the diarrhea. They add in their article in the *Gaz. Med. Belge,* Jan. 5th, 1905, that a Russian physician, Novicor, prescribes it in dyspepsia in the formula of 6 gm. (1 1-2 dram.) of hydrogen dioxid at twelve volumes; 85 gm. (2 1-2 ounces of distilled water, and 15 gm. (gr. iv.) of syrup of orange flowers, giving a tablespoonful every two hours. They prefer to give it in milk or water, 10 drops of the dioxide to 100 gm. (qt. i) of milk, for infants; for adults, about a tablespoonful in a quart of water, sipped as a beverage.—*J. A. M. A.*

The Treatment of Bunions.

I order what are known as right and left socks or stockings, which have a straight inner edge to the foot and are normally curved around the toes so as to prevent dragging on the great toe. It would be better to use a sock or stocking which has a separate apartment for the great toe, but it cannot be found on the market, whereas the "rights and lefts" are on sale in New York

The inner edge of the sole of the shoe is made perfectly straight, and although the sole is as wide as the foot, the curve of the toe resembles so closely the curve of the normal toes that it is not clumsy in fact or appearance. It has been my experience that it is better to have the toe boxed.

The bunion should be bathed night and morning with a four per cent. solution of carbolic acid for a few minutes, and this should be followed by a bath of plain water. The carbolic solution is not only antiseptic, but a decided analgesic.

If after several weeks' trial of proper foot-gear the bursa is still distended with fluid, and it is necessary to aspirate it, the operation is simple, practically painless, and, if antiseptic precautions are practised, a safe one. All the foregoing applies to simple bunion caused by an ill-fitting shoe.

Now, there is a class of cases which have been practically ignored in literature, and the management of them requires no little knowledge of the anatomy of the foot, the gouty and rheumatic diathesis, and physical peculiarities. Many cases of bunion are due to flat foot, which causes the great toe to turn out and brings the prominent metatarso-phalangeal joint against the side of the shoe. In this case, unless the arch of the foot is restored by a plate, the treatment for simple bunion would fail. In the case of enlarged joints from gouty or rheumatic inflammation, these constitutional diseases would have to be overcome by internal treatment and hygienic living, otherwise the local treatment would not succeed. Four of the five tendons attached to the great toe tend to drag the toe outward, and the question of their abnormal contraction must be taken into account. Whenever possible, no operation should be performed on the metatarso-phalangeal joint without an X-ray picture being taken as a guide, and in that the sesamoids must not be mistaken for exostoses. As the deformity is often the result of a simple dislocation, the tripod of the foot should be respected, and restoration secured by removing wedges from the metatarsal or phalanx, or both, and tenotomy.—G. R. PLUMMER, M.D., *N.Y.M.J. and P.M.J.*

Early Treatment of Consumption.

The therapeutic arsenal for the treatment of pulmonary tuberculosis is well stocked and even overstocked, remarks Prof. Renon. Neither the tuberculin of Koch nor the new tuberculin T.R. have given decisive results. The same may be said of the series of serums recommended by men of good faith and of undeniable scientific standing.

One of the best remedies to be utilized in phthisis is arsenic. It may be given in very small doses :

℞ Arsenate of soda ..... 1 gr.
Water..... 10 oz.

A tablespoonful twice a day at meals, and continued twenty days a month for three or four months. There are other preparations of

arsenic, such as cacodylate of soda and arrhenal. The former is employed by the mouth, the rectum or subcutaneously. M. Renon prefers the latter mode. He injects one grain dissolved in twenty drops of sterilized water every two days, or eight injections in sixteen days. He then suspends them for eight days and recommences the series. Arrhenal may be employed in the place of cacodylate of soda, but M. Renon thinks it inferior. The *raison d'être* of the arsenical treatment is to keep the patient in good condition and increase his weight if possible, but it should be used with prudence, especial care being taken to avoid even the semblance of any gastro-intestinal disturbance, as such would act prejudicially in the matter of feeding the patient.

Creosote was considered a kind of specific for phthisis for many years, but it frequently aggravates the condition of the patient by fatiguing the stomach, and, on the other hand, it has frequently provoked hemoptysis. In certain torpid forms of phthisis, however, creosote might be given by the rectum in twenty to thirty drop doses. Synthetic preparations, such as guaiacol or thiocol, replace creosote. Thiocol given in 10-grain wafers, three times a day, has much benefited some patients.

Besides creosote, and acting in a different manner, is urea, utilized first by Harper, in England, which has a favorable action in all forms of tuberculosis. It can be employed in subcutaneous injections and by the mouth. Prof. Renon gives it in wafers containing 12 grains each, two to four daily. Tannin is also an excellent preparation, but, unfortunately, this is ill tolerated by the stomach. It is best given in the form of wafers:

℞ Tannin ..... 5 grs.
Phosphate of lime ..... 10 grs.
For one wafer: five daily.

Tannigen is a good substitute in the dose of four grains three times a day. The glycerophosphates have a good action on the general nutrition: two or three 5-grain doses daily before meals. Lately M. Renon has been employing with much benefit a new phosphated substance called phyline, described by Posternak, which is a phospho-organic principle of vegetable grains. It is well tolerated, improves the appetite, and favors sleep. He gives 10 grains of before the two principal repasts.

One of the complications of pulmonary consumption is fever. For this, rest in bed will frequently be sufficient, otherwise antithermics must be given. Of these there are a host, but those which have given the best results are aspirin and cryogenin, discovered by Lumière, of Lyons. Either of these agents may be given in 4-grain doses twice a day, at three o'clock in the afternoon and at six o'clock.

Two other symptoms frequently require attention—hemoptysis and diarrhea. The former will be treated by the classical remedies, needless to mention. The diarrhea is best treated with :

℞ Cotoin ..... 2 grs.
For one wafer ; two daily, or,

℞ Methylene blue ..... 2 grs.
Lactose ..... 4 grs.
For one wafer ; two daily.

For the cough M. Renon recommends a half grain of opium two or three times a day.—*The Med. News.*

La Grippe :

℞ Sodii salicylatis ..... gr. xlviii.
Acetanilid ..... gr. xvi.
Caffein citratis ..... gr. xvi.
Sodii bicarb ..... gr. xl.
Misce. Et divide in Konseals No. viii.
Sig.: One Konseal every 3 hours.

Ringworm of Scalp. Röentgen rays has been found to be an efficient remedy in treatment of ringworm of the scalp.

The Correction of Retrodisplacements of the Uterus. Of the many operations devised, the ventrosuspension of Kelly and Olshausen and the extraperitoneal shortening of the round ligaments after the Alexander-Adams method, or some modification of the same, are still the operations in most common use. The advocates of the vaginal route insist that they are able to deal as thoroughly with any possible complications found within the pelvis, as through a suprapubic opening. This position, I feel quite sure, will never be accepted by the majority of operators. The slight advantage claimed for the vaginal route can hardly offset its palpable disadvantages. While ready to grant that the majority of cases may be successfully operated on by some method through the vagina, it is certainly true that with tubal infection that has created a mass of matted adhesions, involving, perhaps, intestines or the vermiform appendix, better, cleaner and safer work can be done from above. The majority of cases require the careful use of the curette as a preliminary step, as endometritis is a common complication. If the cervix is lacerated and hypertrophic, it should be repaired or amputated. Lesions of the pelvic floor should, of

course, be repaired. Whatever the operation selected, it should permit of thorough intrapelvic work, and should be one that restores the normal axis of the uterus, at the same time leaving it free to adapt itself to its normal range of motion. The operation I am about to describe meets these requirements.

"1. A transverse incision is made through the skin, fascia, fat and aponeurosis down to the recti muscles. This incision, in the ordinary subject, should be about 1½ inches above the pubis, and should extend laterally to the outer border of the recti. The recti are separated vertically in the median line and the peritoneum opened in the same direction. The pelvis is investigated, proper attention given to the local pathological conditions, and the uterus raised.

"2. A pair of light compression forceps with teeth in the end (Senn's) is passed through the abdominal opening and grasps one of the round ligaments about the middle of its intraperitoneal portion. By traction on the forceps the uterus is pulled somewhat to the side of the pelvis which is opposite the ligament held, the peritoneum is drawn away from the region of the internal abdominal ring, and the ligament made taut so that it may be the more readily recognized in the extraperitoneal manipulations to follow.

"3. Now just beyond the outer edge of the rectus, at the end of the transverse incision, the point of a pair of artery forceps is thrust through the posterior sheath of the muscles, but does not enter the abdomen. The forceps is opened and withdrawn, so that an aperture large enough to admit the index finger is left. The finger is introduced through this opening in the preperitoneal fat, and feels the round ligament without difficulty, for it is brought into prominence by tension on the forceps which holds its uterine end.

"4. The finger passed through the opening just described, is hooked under the extraperitoneal portion of the ligament from below upward, and draws it up into the wound. The sheath of the ligament is then split open by blunt dissection. The sheath and the peritoneum are stripped back in the direction of the uterus, completely divesting the ligament of its covering. It is then drawn out of the wound, and forceps slipped underneath retains it until the opposite ligament is raised and denuded in the same way. If the uterus has been in a state of marked retroversion, the ligaments will have become so attenuated as to allow their approximation in the median line in front of the recti, which approximation will restore the uterus to its normal position.

"5. When it has been determined that the ligaments are long enough to meet in the median line they are each left looped over forceps, while the peritoneum of the median incision and the recti muscles are closed with continuous kangaroo or catgut sutures.

"6. The ligaments are next approximated in front of the recti and tied together.

"7. Now, beginning in one angle of the transverse incision, the cut edges of the aponeurosis are stitched together with a continuous kangaroo suture. When one or two loops of the suture have been passed, the needle, in crossing the interval between the two edges, is made to pass through the ligament. It is well also to pick up a little of the muscle on each side of the ligament in order to provide against dead spaces. This process is continued as each successive loop is passed until the centre of the incision is reached, when the free end of the suture is clamped and left long. Starting in the other angle of the transverse incision (but looping in a contrary direction, so that when the two sutures meet their free ends may be on opposite sides of the wound), a second strand of kangaroo unites the edges of the aponeurosis on that side and picks up the round ligament and adjacent portions of the muscles as before. The kangaroo tendons are tied together, and the ligaments are thus embedded and firmly anchored between the aponeurosis and muscles.

"8. The structures in front of the aponeurosis are closed in the usual manner."

The advantages of the operation may be stated as follows: There is but one incision and through it any pelvic complication may be treated. The operation utilizes the strongest part of the round ligament instead of its distal end. The normal mobility of the uterus is not disturbed, and it is left in the pelvis where it belongs. It causes no vesical irritation or dysuria if the ligaments are not embedded too low down, and no dragging if they are not brought through too high up. The anchorage is superior in permanency to all peritoneal attachments; the uterine portion of the ligament will not stretch away. There are no sutures in fundus to irritate the uterus. The fixation is extraperitoneal; no irritated point invites subsequent adhesions to abdominal viscera. The peritoneal investment of the ligament is not drawn into the abdominal walls, producing funnel-shaped depressions and inviting hernia. It does not interfere with the physiological development of the uterus during pregnancy.

During the last year I have made this operation twenty-three times. In all but three there were intrapelvic or other complications. In ten the appendix vermiformis was removed, either because of a history of definite recurring attacks of appendicitis, or because from its appearance it was deemed wise to remove it. In one case a broad ligament cyst was removed and in several, diseased appendages were taken out. These are mentioned merely to show that there is no difficulty in doing any necessary intrapelvic work through the transverse incision and separation of the recti muscles. In all the cases local office treatment by means of

tampons or pessaries had been resorted to without relief. Most of the cases were in women who are obliged to work, and who preferred to undergo an operation rather than submit to further treatment. The three uncomplicated cases were marked neurasthenics with dysmenorrhea. *While the displacement remains corrected, there has yet been no improvement in the dysmenorrhea, and little or none in their general condition.* There were no deaths or serious complications following these operations. So far as I have been able to follow the cases the results have been all that could be expected.—CHARLES W. OVIATT, M.D., in *the Journal of the American Medical Association.*

Society Reports--Notes of Interest.

FIFTH ANNUAL MEETING OF THE CANADIAN SOCIETY FOR THE PREVENTION OF TUBERCULOSIS.

The fifth annual meeting of the Canadian Society for the Prevention of Tuberculosis was held in the Railway Committee-room of the House of Commons on the afternoon of the 15th of March. The gathering was largely attended by medical men from various parts of the Dominion. Among those present were: A. Mackenzie Forbes, Montreal; A. J. Richer, Montreal; John Noble, Toronto; T. V. Hutchinson, London; Rev. Manly Benson, Arnprior; E. Herbert Adams, Toronto; F. A. Lawrence, M.P., Truro; Rev. W. H. Stevens, Montreal; N. H. Arthur, Sudbury; R. F. Preston, Carleton Place; James Third, Kingston; J. D. Page, Quebec; Clarence H. Brown, H. Beaumont Small, Dr. Dewar, George Baptie, F. Montizambert, Ensign Wm. Thompson, Capt. Oldford, Ottawa; R. S. Weir, Toronto; Chas. Hodgetts, Toronto; R. Preston Robinson, Rev. Thomas Garett, Ottawa; Prof. J. J. Mackenzie, Toronto; P. D. Bryce, Ottawa; J. D. Lafferty, Calgary, N.-W.T.; Sir James Grant, Prof. James Robertson, J. M. Courtney, John Sweetland, J. A. Gemmill, James Manuel, Ottawa; Charles Sheard, Toronto; E. J. Barrick, Toronto; C. A. Daigh, Montreal; D. C. MacIntosh, Lanark; Chas. H. Higgins, J. G. Rutherford, Veterinary Director-General; D. Tamblyn, F. W. Grey, Ottawa; George S. Young, Prescott; W. M. English, London; Rev. A. B. Johnston, Aylmer, Que.; A. F. Jeannotte, Montreal; J. W. Lalonde, Montreal; Wm. Gray, Gatineau Point; W. H. Brunel, Geo. G. McCarthy, A. Harvey, E. Bourgue, D. M. Robertson, W. L. Shirreff, James

Seager, Max O. Klotz, George H. Perley, M.P., Ottawa ; H. Logan, M.P., Amherst, N.S.; Theo. Cypbrit, Montreal, and many others.

Senator Edwards, president of the association, occupied the chair. He opened the proceeding by congratulating the association on the large attendance at the meeting. This showed the great interest taken in the work. This year it was thought better to have just a business meeting, and next year a large convention, occupying two or three days. He referred to the resolution moved by Mr. Perley, in the House of Commons, to the effect that the time had arrived for the Government to take up this great question. The resolution had met with warm approval. A similar resolution was offered in the Senate.

Secretary's Report.

Rev. Wm. Moore, the secretary, in his annual report, after saying that Earl Grey, shortly after his arrival in Canada, had accepted the place of honorary president, set forth that in accordance with the resolution passed at the last annual meeting, a large deputation from all parts of Canada waited upon the Dominion Government with reference to the establishment of a sanatorium. They were presented by Senator Edwards. The Premier expressed his pleasure at meeting them, and his sympathy with their objects. The sub-committee which was appointed, with Dr. Bryce as convener, with the object of getting County Councils and other public bodies to petition for the establishment of a sanatorium in each province, to be assisted from the Federal treasury, has met with gratifying success. Twenty-four petitions to the Governor-in-Council have come from British Columbia alone. The matter has been warmly taken up in Manitoba, many places raising money for the establishment of a sanatorium in that province, hoping, of course, for some help from the Dominion Government. The British Columbia Association for the Prevention of Tuberculosis and the association of Colchester, N.S., were admitted to affiliation. During the year the secretary delivered fourteen lectures in Ontario, eleven in Prince Edward Island, nine in Nova Scotia, and two in New Brunswick. An attack of illness prevented him from continuing the course. He also lectured before the Lanark County Public School Teachers' Association, and the Eastern Ontario Dairyman's Association. During the eleven months to March 1st the literature distributed amounted to 785,000 leaves. The resolution offered by Sir James Grant last year in favor of a medical inspection of children in the schools, was sent to the Minister of Education of the different provinces, but no indication has yet been received of any intention to take action.

The report from Colchester, N.S., showed that an association was formed there on January 5th, 1905, and has aroused widespread

interest. Observation seems to show that tuberculosis is much more prevalent in Colchester and vicinity than the average for the whole Dominion. The death rate from tuberculosis in that county is one in five.

The Finances.

The treasurer's report covered the eleven months ending on March 1st. Its receipts showed cash on hand, $1,199.73 ; membership fees, $13 ; life membership fee, A. W. Fleck, $50; Dominion Government grant, $2,000; collected in small sums at various places, $182.85 ; total receipts, $3,445.58. The expenditures were $2,513.12, leaving a balance on hand of $932.48. The treasurer congratulated the association on this showing. He did not know any association that got so much work done for so small an expenditure.

Mr. F. A. Lawrence, M.P. for Colchester, N.S., said a few words, pointing out that Nova Scotia was the first, and as yet the only province to have a provincial sanatorium. It was modest, but it was a good beginning.

Dr Adams, of Montreal, reported on behalf of the branch in that city. He spoke of the tuberculosis dispensary which has been established there, and which is doing an excellent work. He also praised highly the City Council for its grant of $700, and for the subsequent assistance given by it, as well as its action in appointing one of its health inspectors as the special inspector for the association. During the year several thousand wall cards have been distributed, giving instructions as to the conduct and care of people with tuberculosis and the means of preventing it.

Dr. Barrick said that good progress was being made in raising, by private contribution, the $25,000 which must be secured before the $50,000 voted by the municipality becomes available. He hoped that a municipal sanatorium would be a reality in Toronto before long.

To Check the Disease.

It was moved by Sir James A. Grant, seconded by Mr. George H. Perley :

That whereas the following resolution was agreed to unanimously by the House of Commons, on the 20th February, 1905, viz.:

"That in the opinion of this House the time has arrived when Parliament should take some active steps to lessen the widespread suffering and the great mortality, among the people of Canada, caused by the various forms of tuberculosis ;"

It is hereby resolved that this association do now and hereby respectfully petition the Dominion Government to take such action as may be expedient to constitute a Royal Commission, with authority to inquire into and report upon what active steps should

be taken to lessen the wide-spread suffering and the great mortality among the people of Canada, caused by the various forms of tuberculosis.

It is further resolved that a special committee be appointed by the Executive Council of the association to forward this matter.

Mr. George Perley, M.P., for Argenteuil, seconded the motion. He said that the Executive Committee had come to the conclusion that the best way of getting at the matter was simply to ask the Dominion Government to appoint a commission to interview the authorities of the different provinces to see what they will do, and what form the co-operation between the provinces and the Dominion should take. His impression was that the Government would not take the initiative in doing anything whatever, but would have to be prompted and pushed to it. The sympathy which the movement had received from the members of the House of Commons was greater than its best friends had expected.

Sir James Grant had no doubt that the resolution would receive the closest possible attention from the Government. There were 8,000 deaths annually in Canada from tuberculosis, and the subject was eminently one in which the Government should take action. Sir James also referred to the great work done by the association during the past four years, and expressed strong hope for its future.

Prof. J. W. Robertson referred to the demand made by the Government in the House for a definite scheme as a condition of assistance. He thought that the commission which was asked for might succeed in drawing up such a scheme.

Dr. Sheard, Medical Health Officer of Toronto, remarked that dealing with consumption was an expensive matter, and for that reason municipal and other bodies had sometimes a tendency to shoulder it from one to another. The problem of dealing with a consumptive who is poor was serious. Thus far one result secured by dissemination of literature was to spread just about enough rough knowledge to frighten people, and to cause the consumptive to be more or less ostracized. To deal with consumption properly it was necessary to know what the Government of the Dominion would give, and what the provinces would give, and what would be done by the municipalities.

Some remarks on the subject were also made by Dr. Rutherford, Dr. Hodgetts, Ontario Provincial Health Inspector; Dr. Third, Professor of Medicine at Queen's University, and Drs. Noble and Barrick, of Toronto.

The resolution was adopted.

Senator Edwards was re-elected president, and Mr. J. M. Courtney was re-elected honorary treasurer. The following Executive Committee was selected: Bishop Hamilton, Ottawa; Dr. Charles A. Hodgetts, Toronto; Dr. Adams, Montreal; Dr.

Lachapelle, Montreal; Dr. Botsford, Moncton, N.B.; Mr. F. Lawrence, M.P., Truro; Dr. J. G. Toombs, Mt. Stewart, P.E.I.; Dr. Gordon Bell, Winnipeg, Man.; Dr. J. D. Lafferty, Calgary, N.-W.T.; Dr. C. J. Fagan, Victoria, B.C. Rev. Wm. Moore was re-appointed secretary. His Excellency the Governor-General, the honorary president, will appoint ten more members of the Executive Committee. The honorary vice-presidents are Sir Wilfrid Laurier, Lord Strathcona, and the Lieutenant-Governors of the provinces.

At night, in the Normal School, Prof. Adami, of McGill University, delivered a lecture on "Adaptation and Tuberculosis." It was a timely and instructive contribution upon an important subject. His Excellency Earl Grey presided and delivered a sympathetic address.

Fibroid Tumors. Dr. Barton Cook Hirst stated before the Obstetrical Society of Philadelphia, that he had treated 189 cases of fibroid tumors by some form of surgical procedure. Of these, twenty-seven per cent. were myomectomies while sixty per cent. were hysterectomies. The remainder were made up of vaginal enucleation, oöphorectomy, and ligation of the uterine arteries. Referring to electricity in the treatment of fibroids, he had found it a useful palliative treatment of the hemorrhage in this condition, but had never seen a tumor reduced in size or the slightest benefit except for the hemorrhage.

Adrenalin Chloride in Ashmatic Attacks. Dr. D. M. Kaplan comes to the following conclusions in a paper read before the New York Academy of Medicine with regard to the hypodermic use of adrenalin chloride in asthmatic attacks: That this remedy has a distinct place in the therapeusis of asthmatic seizures; that the effect produced by it apparently substantiated, in certain cases, the vasomotor origin of the seizures. In Dr. Kaplan's experience, the contraindications to the drug were generally overstated; even large doses, freely used, did not give rise to glycosuria, although relieving the paroxisms with greater promptness and certainty than most of the other drugs at our command; the hypodermic use of adrenalin was in no sense curative of the disease as such. In long-standing cases Dr. Kaplan has seen good results follow upon a dose of from 25 to 30 minims, the asthmatic attack being usually cut short in five minutes. He has also used the drug in pulmonary edema with very satisfactory results.

Appendicitis. Dr. S. West stated before the Royal Medical and Chirurgical Society the following conclusions with regard to appendicitis: The great majority of all cases of appendicitis (three-quarters) recover without operation; some recur and these should be operated on in the quiescent stage, the risk being there very small; when suppuration was manifest or probable, operation should be performed at once; even perforation cases might be less fatal if operated on earlier; the risk of perforation was exaggerated; the opening of the abdomen was not a trifling procedure, but introduced risks of its own; each case must be considered on its own merits and dealt with accordingly; the success of operation largely depended on the skill of the operator, so that a personal factor entered into the results which could not be allowed for in general statistics.

Extra-Uterine Pregnancy. Dr. Wilmer Krusen, before the North-West Medical Society of Philadelphia, gives the following causes of "Extra-Uterine Pregnancy": Mechanical causes which interfere with the downward passage of the ovum; causes resulting from inflammatory conditions of the tubes, ovaries and pelvic peritoneum; physical and developmental abnormalities which favor decided formation in the tubes.

Railway Spine: At the recent meeting of the Medical Society of the State of New York, Dr. Edward B. Angell, of Rochester, N.Y., read a paper on Railway Spine. While Erichsen's classic remains the guiding star of experts, in law and medicine, the ideas of the true pathology yet remain very indefinite. As a rule these cases present exaggerated manifestations unproportionate to the injury received; and in most cases it is a mental rather than a bodily condition, which is quite plain from the shifting of the tender points, and no pathological condition present, there develops a true delusion as to the patient's physical condition. Railway spine is unfortunate, as it is really a brain injury.

Hay Fever. Dr. Otto J. Stein, before the Chicago Medical Society, read a paper recently having for its title: "The Dunbar Antitoxin Method of Treating Hay Fever," in which paper he reported the cases treated by this method. He considers that the remedy must be applied before the onset of the attack, thus regarding the remedy more as a prophylactic one. It proved efficient in all but three of his cases.

Puerperal Pyrexia Dr. W. Hirst Bateman stated before the Rochedale and District Medical Society of England that from the point of view of immediate treatment, it was important to decide whether the rise of temperature was connected with the puerperal condition and then to distinguish between sapremia and septicemia. Treatment should be a calomel purge; if the temperature did not fall within a few hours the uterus should be douched with perchloride of mercury; a mixture of quinine and ergot should be given; if the temperature remained high after two or three douches the uterus should be curetted, douched, and packed with iodoform gauze, the packing to be removed in five or six hours; antistreptococcic serum may be used.

Gastric Ulcer. Dr. E. G. Janeway gave before the New York Academy of Medicine the following statistics of cases of ulcer of the stomach which had terminated fatally in that city since 1895, as follows: In 1895, 71 cases, 43 males and 28 females; in 1896, 81 cases, 33 males and 48 females; in 1897, 65 cases, 32 males and 33 females; in 1898, 62 cases, 31 males and 31 females; in 1899, 71 cases, 34 males and 37 females; in 1900, 73 cases, 41 males and 32 females; in 1904, 93 cases, 51 males and 42 females.

Physician's Library.

A BOOK that promises to be of professional value is announced to appear in April from the press of Morang & Co., Toronto. It is a new work on Obstetrics by Dr. Adam H. Wright, Professor of Obstetrics in Toronto University.

J. B. LIPPINCOTT COMPANY announce that they will publish during the present year a translation by Dr. Albion Walter Hewlett, of the Third German Edition of the "Principles of Clinical Pathology," by Dr. Ludolf Krehl, with an introduction by Dr. Wm. Osler, of John Hopkins University. The work is well known in this country and in Europe as an authority upon the subjects treated, and has been copyrighted in the United States under the Interim Copyright Act.

The Medical Examination for Life Insurance and its Associated Clinical Methods, with Chapters on the Insurance of Sub-Standard Lives and Accident Insurance. By CHARLES LYMAN GREENE, M.D., St. Paul, Professor of the Theory and Practice of Medicine in the University of Minnesota, member of the Association of American Physicians, Ex-President of the National Association of Life Insurance Examining Surgeons, formerly Medical Director of the Minnesota Mutual Life Insurance Company, etc., etc.

With the great growth of life and fraternal insurance during the past few years practically every physician is engaged to some degree as examiner for some company or association. The physician who in many cases finds this a growing addition to his income very naturally looks for some work that will be of aid in this important field of medicine. Greene takes up this subject in a very attractive and practical manner and his very excellent work will prove of great assistance to the busy physician. The opening chapters are taken up with a history of the growth of life insurance and the various forms of contracts offered by different companies. This is followed by an excellent review of the questions asked of applicants by the examiner and their import. The question of occupation and heredity are carefully gone into and tables are given in illustration. A considerable portion of the work is devoted to physical diagnosis of the chest and abdomen, in which respect the work will be of particular use to the insurance examiner. An excellent chapter is also added on urinalysis, in which the chemical, microscopic and bacteriological examination of the urine is dealt with and the question of albuminuria in relation to life insurance is discussed. The insurance of substandard lives is discussed in a very well written chapter, and the question as to the amount of lien to be placed on the policies of those with slight physical defects is very carefully taken up.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure blackmailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only $2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

The attention of the profession throughout the Province is again called to the coming meeting of the Ontario Medical Association, June 6th, 7th and 8th next. As was the case last year the sessions will be held in the west lecture hall of the Medical Buildings, Queen's Park. The programme is being rapidly filled and any one desirous of presenting a paper should inform the Secretary at an early date. The officially-invited guests for the meeting are Dr. A. J. Ochsner and Dr. W. B. Pritchard. Dr. Ochsner, Surgeon to St. Augustine's Hospital, Chicago, is he whose aggressive surgery and whose courtesy to many Canadians visiting his crowded clinic, have made him so very popular with men on this side the line. The names of Dr. Ochsner and his friend, Dr Mayo, are, perhaps, more upon the lips of men studying the advances in surgical thought than those of any other two operating surgeons on this continent. Dr. Pritchard, of the Post-Graduate College of New York City, has identified himself by his work in nervous diseases. He likewise is well-known to many in Ontario, his friends predicting for him a very warm reception here.

The President of the Canadian Medical Association, Dr. John Stewart, of Halifax, has been paying a visit to Montreal and Toronto in the interests of the next annual meeting of that body, which is to take place from the 22nd to the 25th of August, in the city down by the sea. There has not been a meeting of the Canadian Medical Association in Halifax since 1881, and the number present at that meeting just numbered fifty-three. That was twenty-four years ago. The meeting was held on the 3rd and 4th of August, and Dr. William Canniff (now in Toronto) was the president. Dr. William Osler was elected general secretary. Amongst those present at that meeting were Dr. Adam H. Wright, Toronto (who we believe acted as secretary in the absence of the then secretary, Dr. David of Montreal); Dr. William Canniff, Toronto; Dr. Daniel Clark, Toronto; Dr. A. B. Atherton, Fredericton; Dr. William Oldright, Toronto; Dr. F. R. Eccles, London, Ont.; Dr. James Stewart, Brucefield, Ont. A page and a half held all the signatures on the Treasurer's register, where at the annual meetings now-a-days eight to ten pages are required. From Montreal, Drs. Robillard, Fenwick, Bessey, Hingston and Ross were present, the bulk of the attendance coming from Nova Scotia, which contributed thirty-four. Six came from New Brunswick and none from Prince Edward Island. We believe that the Maritime Provinces alone have a medical population something like 800, from which 200 should be got together to a great medical convention like this is going to be. There will almost be sure to be from 100 to 200 present from Quebec, Ontario, Manitoba and the West. Indeed, the signs are good that every province will be fitly represented as it ought to be. An interesting item showing the signs of the times and the advances which have been made since, was a notice of motion at the last Halifax meeting, presented by one of the members: "Whereas the system of specialism and specialists which at present obtains to a certain extent in the Dominion and which has developed to very large proportions in the neighboring Republic, is for the most part the outgrowth of superficial professional education and a want of success as practitioners of medicine and surgery, therefore resolved: That it is the opinion of this Society that specialism should be discountenanced by the members of the Society, and that specialists, except in the rare cases where long experience, extended study and peculiar aptitude have placed a medical man in a special position towards his brethren, should be treated and looked upon as irregular practitioners. Be it therefore resolved, that the members of this society pledge themselves to do all in their power to check the growth of this species of evil."

One or two incidents of the past month invite our attention to patent medicines once again. It will not be necessary to say any thing about analysing any of these multifarious nostrums. We simply desire to call attention to two very commendable articles appearing in the March and April issues respectively of that well-known periodical, *The Ladies' Home Journal*, from the pen of the talented editor thereof, Mr. Edward Bok, who is an uncompromising opponent of fraud as it stalks forth in the guise of patent medicines. It is gratifying that the opposition is a genuine and consistent one, for no patent medicine concern could purchase a single line, to say nothing of a page, wherein to besmirch the pages of that journal and damage the health and physical well-being of its readers. It would appear to us that it is about time that some legislators moved in the direction of keeping these articles and their mendacious advertisements out of our country. An article which is manufactured in Cincinnati, for instance, or any other point in the United States, of the patent medicine variety, should be totally prohibited importation into Canada. We desire as well in this connection, speaking of magazine articles, of a medical character, to call attention to the fact that *McClure's Magazine* is another high-class periodical prohibiting patent medicine advertisements. In the April issue of this magazine there is a readable and highly interesting article by Dr. Wilfred Grenfell, who devotes his life and his energies to the fisherfolk of Newfoundland and Labrador. The first number of a new magazine, the *Grand Magazine*, will scarcely appeal to the medical profession on account of a nasty article, which seeks to stir up strife by endeavoring to turn people away from hospitals where clinical instruction is allowed. 'Tis strange how some people would do away with this and that, never for a moment thinking that the very best thing they could do would be to do away with themselves.

Talking about advertisements, medical men are in duty bound to read or to look at, at the least, from time to time, if not every week or month, the advertisements appearing in the front and rear forms of their medical journals. Why is it incumbent on the medical profession to give a few moments each month to an inspection of the advertising pages of the medical journals? Simply because of the fact that there is not a medical journal published which could profit and live by subscriptions alone, unless, indeed, it be the journals of strong and powerful organizations. As the medical profession must look to and depend upon medical journals for diffusion of knowledge, medical journals are therefore necessities, though all are willing to admit that we could get along with half the number at present published. If, then, manufacturers

of chemicals, physicians' and surgeons' supplies, come to the aid of the medical journals and by so doing help the diffusion of good and practical as well as scientific knowledge through the medium of the medical press, ought not the medical profession to realize that they have some duty to perform in this direction? The medical journal and those interested therein stand as a medium between the manufacturing and supply houses on the one hand and the profession on the other; and in ways which are not apparent to the eye nor yet preached from the house tops, does a certain amount of good, more in fact than chronic fault-finders, who can only sneer and emit spite on the conduct of medical journals and their advertising pages in particular. Plain speaking is generally honest speaking; and we cannot help saying it, after due consideration of the subject, that that house which advertises in the medical journals is the house which should be patronized by the medical profession, and that that house which is too small and too mean to help along medical journalism, even a trifle in some direction, does not deserve the patronage of the medical profession. This is, practically speaking, preaching a boycott, and a boycott seldom, if ever, appeals to honest or decent men; but where there are large manufacturing houses making millions of money out of the medical profession and doing absolutely nothing but making money out of that profession, and never returning one cent or one dollar to it, its associations or its medical press, or its medical colleges, the call to boycott them in the interests of those houses who do spend money in reaching the medical profession through the medium of the medical press is just. The houses which do something for the medical press or the medical associations are the houses which should receive the loyal support of the medical profession. We are very well aware of the fact that this doctrine will not receive endorsement in certain quarters, and that in others it will. We are perfectly well aware, too, of the fact that the doctor, like any other individual, will follow the instincts of economics, and purchase where he gets cheapest and best; but we are well aware, at the same time, that there is a just and righteous *esprit de corps* in the body medic which is not to be found in any other class or body of men; that the profession of medicine, on great, broad and liberal lines, cares more for the tenets of its ethics, than for mere paltry financial gain, and that when once brought to a clear understanding of the fact that there are some houses which deserve their sympathy and patronage, and that there are others which are quite beyond the pale of their attention or support, will follow out, on these lines, the dictates of a reasoning and righteous mind.

News Items.

CANADIAN.

DR. H. B. ANDERSON, Toronto, is in Atlantic City.

DR. LEEMING has been appointed bacteriologist of the city of Winnipeg.

A MOVEMENT is on foot to establish a hospital for railway men in Winnipeg.

DR. J. D. LAFFERTY, Calgary, has been visiting Ottawa, Montreal and Toronto.

LORD STRATHCONA will donate a Nurses' Home to the Royal Victoria Hospital, Montreal.

IN 1904 the Victorian Order hospitals treated 2,898 cases throughout the Dominion of Canada.

DR. A. P. PROCTOR, Kamloops, B.C., has taken residence in Vancouver, and will practise there in the future.

THE Ontario Government is likely to give a grant of $25,000 to the Muskoka Free Hospital for Consumptives.

MR. W. T. BARRETT, of Dawson, is on his way home after spending two months in the New York Hospitals.

Dr. J. GEORGE ADAMI, professor of pathology in McGill University, has been made a Fellow of the Royal Society.

Dr. W. H. B. AIKINS, Toronto, who has been in Europe for the past three months, sails for Canada on the 25th April.

DR. A. E. VIPOND, who has been in Europe for the past year and a-half, has returned and resumed practice in Montreal.

WINNIPEG is to have a fine new Medical College building situated contiguous to the General Hospital, to cost $50,000.

DR. WILLIAM CANNIFF, who was the first Medical Health Officer of Toronto, is here again after an absence of ten years.

THE Southern Medical Association of Manitoba and the Winnipeg Medical Association met in Winnipeg on the 7th of April.

DR. J. F. W. ROSS, Toronto, has returned home after spending three months in Southern California, Texas, New Orleans and St. Augustine, Florida.

THE births in British Columbia in 1904 numbered 2,139, the marriages 1,252 and the deaths 1,734. Pneumonia claimed 104 victims, and tuberculosis 79.

IT is understood that complete arrangements have been made whereby the Medical Faculty of Bishop's College University, Montreal, will amalgamate with McGill.

DR. H. G. MCKID, Calgary, N.W.T., recently entertained Dr. Chown, of Kingston, and Dr. H. H. Chown. of Winnipeg. A number of Calgary medical men were present.

THE *Canada Medical Record*, Montreal, has ceased publication and has been amalgamated with the *Montreal Medical Journal*. Dr. F. W. Campbell, Montreal, was the editor.

MONTREAL registered 7,351 deaths in 1900, 6,915 in 1901, 7,954 in 1902, and 6,895 in 1903. In the same years the deaths from tuberculosis were 692, 647, 664 and 633 respectively.

THE *Bulletin Medicale de Quebec*, Montreal, is advocating the formation of small medical libraries in districts and the formation of county and district medical societies, where the leading medical literature of the day would be always ready at hand for reference.

THE new Medical Council of British Columbia consists of the following: Victoria, Drs. John C. Davie, O. M. Jones and Charles J. Fagan; Vancouver, Dr. R. E. McKechnie; New Westminster, Dr. R. Eden Walker; Kamloops, Dr. A. P. Proctor, who has since removed to Vancouver.

DR. SIMON J. TUNSTALL, Vancouver, B.C., has been elected President of the Graduates' Society of McGill University of that province. Dr. W. J. McGuigan was re-elected secretary. We are pleased to announce that Dr. McGuigan, who has been at Harrison Hot Springs, is regaining his usual health and vigor.

DR. JAMES STEWART, Montreal, and Dr. F. W. Campbell, Montreal, are stated to be recovering from very severe illnesses.

NEW BRUNSWICK MEDICAL COUNCIL.—The following were the officers elected at a meeting of the Medical Council of the College of Physicians and Surgeons of New Brunswick on the 27th of March: President, Dr. A. B. Atherton, Fredericton; Treasurer, Dr. Thomas Walker, St. John; Registrar, Dr. Skinner, Fredericton.

WINNIPEG GENERAL HOSPITAL.—The report says that during the year there were 3,868 patients treated, with an average course of treatment of 19½ days. In 1903 there were 3,354 patients, and in 1902 there were 2,928 treated. A call is made for more funds, as during the year there were very heavy expenditures both in extensions and in maintenance. The decrease in the death rate was noted, while attention was called to the unusually large number of typhoid patients who were treated. The general cash statement shows that during the year the total receipts amounted to $168,629.06, to which is added an overdraft at the bank of $6,-911.82. The total expenditures amount to $175,636.63, leaving cash on hand $1,213.63. The medical report shows that of the 3,868 patients treated during the year, 271 died, a proportion of 7.06. The percentage of mortality in 1903 was 7.45, and in 1902 it was 6.45. The total number of typhoid patients treated was 728. Of these 180 were admitted during the month of October, and 166 in September. On October 10 there were 178 typhoid patients in the hospital, and between October 1 and Dec. 15 there were never less than 148 cases in the wards. The following are the statistics for the year ending Dec. 31, 1904: Number of patients in hospital Jan. 1, 1904, 151; number of patients admitted during the year, 3,576; number of births during year, 141; total number of patients, 3,868; total number of days' treatment, 75,228; average number of days' stay per patient, 19.45; average number of patients per day, 206.03; greatest number of patients in one day, 287; least number of patients in one day, 149; outdoor department, consultations, 4,772; number of children under 12 years treated, 455; number of deaths, 271; percentage of deaths, 7.006; number of operations, 1,042; ambulance trips, 1,461. Of the total number of patients treated 36.7 per cent. were Canadians, the nativity figures being as follows: Canada, 1,421; England, 828; Scotland, 231; U.S.A., 139; Ireland, 131; Iceland, 75; Austria, 75; Russia, 114; Galicia, 150; Sweden, 120; Germany, 95; Poland, 34; Denmark, 21; France, 5; Belgium, 4; Wales, 10; other, 415.

OFFICE OF THE PROVINCIAL BOARD OF HEALTH—DEATHS FOR FEBRUARY, 1905.—The returns for the above month are somewhat more complete than for the same month last year, and

it is gratifying to know that the number of deaths reported are less. In February, 1904, the Division Registrars reported 2,332 deaths with a death rate of 14.4 in 1,000, while for the corresponding month this year 2,263 have been recorded, representing a population of 1,935,897, which makes the mortality rate 14.0 in 1,000. The cities, towns and villages reported 1,294 from a population of 927,000, which brings the death rate up to 16.1, but the rural districts returned only 1,014 deaths from a population of 1,008,897, giving a death rate of 12.0. Small-pox has reached a very low point, only 8 cases occurring during the month as against 41 with 1 death a year ago. Scarlet fever shows a case reduction, but a slightly increased death rate ; of the 209 cases and 16 deaths that have occurred, 141 with 9 deaths were reported from the cities and towns, which makes a case mortality of 6.3 per cent., and in townships 68 cases and 7 deaths took place, making a case mortality of 10.3 per cent. Diphtheria has not been so prevalent, as as may be seen by the comparative table ; cities and towns returned 216 cases with 28 deaths, and the rural districts 54 with 7 deaths, the case mortality being the same in both, 12.9 per cent. Typhoid fever shows but little change, while tuberculosis caused 165 deaths, or 20 less.

COMPARATIVE TABLE.

DISEASE.	1905.		1904.	
	CASES.	DEATHS.	CASES.	DEATHS.
Smallpox	8	0	41	1
Scarlet Fever	209	16	251	13
Diphtheria	270	35	289	43
Measles	119	2	41	1
Whooping Cough	22	3	36	16
Typhoid Fever	43	19	60	18
Tuberculosis	177	165	185	185
	848	240	903	277

UNITED STATES.

THE American Medical Association meets in Portland, Ore., from July 11th to 14th. As a number of British Columbia practitioners purpose taking in this meeting, they will be glad to know that Dr. Kenneth McKenzie, who was a guest at the Vancouver meeting of the Canadian Medical Association, has charge of the arrangements and entertainment of visiting delegates.

CASTRATION OF IMBECILES.—The Pennsylvania legislature has passed a bill authorizing castration in cases of hopeless imbecility.

CEREBRO-SPINAL MENINGITIS has claimed 386 lives in Greater New York for the first three months of this year, most of the victims being children.

DR. WILLIAM OSLER is to be given a farewell banquet at the Waldorf Astoria, New York, on the evening of May 2nd. Invitations to subscribe to this dinner may be obtained by applying to the chairman, Dr. James Tyson, 1,506 Spruce St., Philadelphia.

THE Ohio State Board of Health has issued leaflets to physicians to give to their patients suffering from venereal diseases. These inform the patient of the hygienic measures to be adopted to protect himself and others who come in contact with him.

DR. LEWELLYS FRANKLIN BARKER, a graduate of the University of Toronto, has been appointed to succeed Dr. Osler as Professor of Medicine at Johns Hopkins University. Dr. Barker has been Professor of Anatomy at Rush Medical College, Chicago, for the past five years.

BILL TO BAR THE SALE OF DRUGS.—A Chicago member of the Illinois legislature has a bill before that body which proposes that morphine and opium be sold only on physicians' prescriptions. The bill further stipulates that a druggist will not fill a prescription unless certified to by the physician who gave the original prescription.

BRITISH AND FOREIGN.

PATENT MEDICINE ADVERTISEMENTS BARRED.—A new law in Norway forbids newspapers advertising all foreign patent medicines.

Special Selections.

NOTE ON CHALYBEATE THERAPY.

By William Krauss, Ph.G., M.D., Memphis, Tenn.

There have been volumes written on chalybeate therapy and the controversies upon the absorbability of this or that form of iron have occupied the attention of clinicians for many years. Among the many preparations claiming the attention of clinicians, the one devised by Dr. Gude, chemist, of Leipzig, has received the endorsement of the ablest men on both continents for ten years. The writer has used it to the exclusion of all others, with the exception of a few disappointing experiments with others claiming equal merit, and has published two papers upon the subject.

It would seem that when one has used a certain medicament for years and with uniformly good results, and especially if this agent definitely eliminates the shortcomings of formerly employed products of the same elements, one is apt to take its effects as a matter of course, and further discussion would seem useless, or at least superfluous. When it happens, however, as is usually the case after a certain article has had a successful career, that many similar products strive to take the place of the original, generally resulting in disappointment to the user, it becomes a duty to take stock of the evidence in the case and see how far the confidence in the one and the distrust of the other is justified.

For this reason I have had compiled from separates and reprints some of the results of a few trustworthy observers.

1. *Secondary Anemia.*—H. D. Peterson (*Chicago Medical Recorder*, 1896), treated many cases, reporting 5 in detail, and says: "Pepto-Mangan is easily absorbed by the digestive tract without any disturbance of the same, is not injurious to the teeth, and produces no constipation."

Dr. J. W. Frieser, Vienna (*Therapeutische Monatshefte*, February, 1902), reports treating many cases, among which he made detailed studies upon 43 cases and summarizes: "It can be warmly recommended for extensive use in the treatment of anemic conditions."

Dr. Hugo Summa, St. Louis (*New York Medical Journal*, 1895), recommends its use after tests in 34 cases, saying: "It is especially worth mentioning that no bad after-effects could be detected. In this connection I call special attention to the absence of constipation that could be traced back to the use of this preparation.

Dr. Sam'l Wolfe, Philadelphia, reports upon 50 cases observed during about four months, and concludes: "That Pepto-Mangan is a highly available preparation of iron, on account of its liquid form, pleasant to taste, non-corrosive action on the teeth and unirritating effect on the digestive organs, admitting thus of easy gradation of dose, easy administration to children and avoidance of unpleasant effects in all cases. That it is an efficient and rapid restorer of the normal quantity and quality of the blood, etc."

Dr. Fritz Euler-Rolle, Vienna (*Wiener Klin. Rundschau*, March 29, 1903), mentions 14 cases of anemia, besides a number of cases of other diseases, in a very complete report in which he is pleased with its absorbability and (on account of the abundance of peptone it contains) its food value in delicate stomachs, and finds it free from all the objections usually urged against iron preparations, and its results prompt.

Dr. C. A. von Ramdohr (*New York Medical Journal*, June 26, 1897), in connection with some gynecological cases, reports 7 cases of anemia, in which there was a rapid improvement.

Dr. H. P. Loomis, in a paper before the New York Academy of Medicine (June 18, 1893), reports a number of cases, 8 in detail, in whom there was a rapid increase in red cells and hemoglobin, and in most cases with no constipating effect.

Drs. Diago and Benitez, Superintendent and Chief of Laboratory, Hospital No. 1, Havana, Cuba (*Progreso Medico*, Havana, April, 1902), report 6 cases in detail and summarize as follows: "We may say conscientiously that it is the best remedy we know of for the purpose, and that we do not hesitate to commend it to the profession, especially our confreres in Cuba, as an iron preparation that possesses all the advantages that can be demanded of such a remedy and none of the disadvantages that are characteristic of other iron preparations. We would especially emphasize also that Pepto-Mangan (Gude) is very pleasant to the taste, and is most easily taken by patients of all ages and with the most delicate digestions."

Dr. Juan Pablo Garcia, Havana (*La Revista Medica Cubana*, August 1, 1902), says: "I have had the opportunity of testing the efficiency of this preparation of iron in a large number of cases in both hospital and private practice, and have found it the most satisfactory iron compound that has come under my notice. It is

not at all constipating, its taste is not astringent, so that it lacks the great disadvantages of most other iron compounds." He says further that it causes no disturbances of digestion and its therapeutic efficiency has been attested by the best clinicians throughout the world.

Dr. Louis J. Gravel, Physician-in-Chief to the Hotel Dieu, Montreal (*Buffalo Med. Jour.*, August, 1903), prefers the term dysemia, meaning "bad blood," reports 13 cases with blood examination, and says: "Comparing my results with Pepto-Mangan (Gude) with those obtained from other chalybeates of this class, I have been led to give it decided preference."

Dr. Chibas and George A. de Santos Saxe, of Columbus Hospital, New York (*Int. Jour. Surg.*, June, 1903), report 40 cases, with tabulated results and complete bibliographic review (which has facilitated this compilation very much), and say they have used it in the hospital for over two years in anemic convalescents with uniformly satisfactory results. "In no case did constipation, nausea, headache, or digestive difficulties follow its administration."

Dr. Hermann Metall, Assistant Physician at the General Polyclinic, Vienna (*Med. Chir. Centralblatt*, January, 1902), reports 23 cases of anemia consequent upon a variety of conditions, of which 12 showed a normal hemoglobin per cent. after 14 days, 5 after 3 weeks and 5 after a month. He concludes that it is "a reliable and valuable blood-building remedy, which can be recommended for general use in appropriate cases."

2. *Anemia Consequent Upon Special Conditions.*—Dr. Mateo M. Guillén, at Randall's Island Children's Hospital, gives a tabulated report of 32 cases of infantile anemia with very elaborate blood chart, including some very desperate cases of cachexias, and says: "In no case did we have to suspend treatment on account of any untoward influence on the delicate organisms of sick infants." Three cases classed as hopeless made a complete recovery. The paper is very instructive.

Dr. J. M. Frieser (*vive supra*) also reports great success in infantile anemia.

Dr. J. K. Bauduy (*St. Louis Medical Review*, February 26, 1898), reports upon a number of cases of neurasthenia, 12 of them in detail, with blood examinations by Dr. Carl Fisch, and says: " . . . The results, however, were indeed a surprise to myself, for the concomitant deranging sequelæ were so slight that but in very few instances in my extensive utilization . . . was I obliged to discontinue it. . . . This particular remedy, I am now convinced, will prove a great boon to the patient and the physician. . . . Of course we do not consider the remedy

applicable to cases of lithemic neurasthenia, nor in any manner a specific in any variety of neurasthenia."

Dr. Ludwig Pohl, City Physician, Vienna (*Aertzl Centr. Anzeiger*, September 20, 1899), has used Pepto-Mangan (Gude) in over 100 cases of chlorosis, anemia, neurasthenia. hysteria and malarial cachexia, and says: "I have previously mentioned that it may be positively assumed that Pepto-Mangan (Gude) stimulates the hemopoietic organs to increased activity. . . . Decided amelioration in the leukemic state, arrest of the process in severe cases for a long time, reduction of the glandular swellings, improvement in the relation between the red and white corpuscles, were noted by me in several cases."

Dr. J. S. Perekhan (*Chicago Clinical Recorder*, 1896) reports a number of cases, 6 in detail; Dr. C. A. von Ramdohr (*vide ref. supra*) 12 cases in detail; and Dr. Gellhorn, at Mackenroth's Clinic, Berlin (*Therap. Monatshefte*, 1897), mentions 60 cases, some in detail, all of gynecological patients with a variety of conditions, some post-operative, and all testify to the improved blood findings, Dr. Gellhorn concluding as follows: "I feel justified in asserting that in my therapeutic trials with Pepto-Mangan I obtained all that can be rationally demanded."

In surgical conditions calling for improvement in the blood, Drs. Stuart McGuire (*Vir. Med. Semi-Monthly*), 20 cases, and George G. Van Schaick (*New York Med. Journal*, June 2, 1900), 50 cases, report favorable results. The latter concludes: "We have in such a preparation as Pepto-Mangan (Gude) a means of obtaining good results with a certainty that is almost mathematical, and without any of the distressing symptoms so frequently following the use of the inorganic iron preparations."

Dr. H. Edwin Lewis, Burlington, Vt. (*Vt. Med. Monthly*), Dr. Ed. C. Hill, Denver, Dr. W. O. Davis (*New York Int. Jour. Surg.*, September, 1902), together with some of the authors already mentioned call especial attention to the value of the preparation in irregular menstruation, sterility and other sexual anemias in women.

Dr. Karl von Ruck (*New York Medical Journal*) finds in Pepto-Mangan (Gude) the best preparation in the anemia of tuberculosis, being more efficient and more easily borne; he had used it in 70 cases, 12 being reported in detail, in some of which comparative tests were made with other iron preparations. Other observers also mention it in tubercular anemia.

Cachexia finds especial mention by Fritz Euler Rolle, Pohl, and Fasano, the latter professor at Royal University, Naples (*Arch. Int. di Med. e Chir.*, March, 1899), discusses iron medication in detail, calling special attention to the chemistry of the subject and

reports having treated primary anemia, 20 cases; chlorosis, 25 cases; malarial anemia, 7 cases; tnbercular anemia, 8 cases; uterine diseases, 11 cases; scrofulosis, 12 cases; rachitis, 10 cases; convalescents of exhausting diseases, 15; total, 108 cases. He says: "To recapitulate, Pepto-Mangan (Gude) not only deserves the place it has already acquired in therapeutics, but it merits even greater recognition, because all clinicians ought to make use of it in pathological processes in which the object is to restore to its normal condition the altered quality of the blood."

After this array of evidence it is only necessary to add that since this constitutes about all the clinical literature upon which our knowledge of the subject is based, it is rather significant that it was all done upon this particular product. In no instance is it claimed that the preparation is as good as something else, but it is simply set forth by the observers that this was the preparation used and that it met these indications in the manner described. Since there is no official preparation that meets these requirements the manufacturers of Pepto-Mangan (Gude) deserve all the credit which the product has earned for them.—*The Charlotte Medical Journal*, February, 1905.

THE TREATMENT OF MENSTRUAL DISORDERS, WITH SPECIAL REFERENCE TO CASES IN WOMEN SUFFERING FROM MENTAL DISEASES.

By George S. Walker, M.D., Staunton, Va.

First Assistant Physician in Charge of Female Department, Western State Hospital, Staunton, Va., etc.

The connection between disorders of menstruation and disorders of the brain and nervous system has long been an established fact. The dependence of the psychic functions of women upon the menstrual function; the effects of the menopause upon mentality, are all subjects that have received the attention of clinicians for many years. It is a well-known fact, correlated to the peculiar connection between the mind and the sexual apparatus, that amenorrhea is not infrequently met with in the insane. The problem as to how to treat insanity is one of the most difficult in therapeutics; and in the modern conception of this treatment all agents that tend directly or indirectly to further the equilibration of the mental functions have a legitimate place.

One of the most difficult phases of this problem is the treatment of the menstrual disorders in insane women, and the importance of correcting any such disorders in this class of patients is realized by all who are aware of the fact, noted by numerous clinicians, that the improvement of the menstrual function leads to a marked amelioration in the mentality of these patients in very many instances.

In an institution like the hospital with which I am connected, we naturally come face to face frequently enough with the question of treating the amenorrhea that is noted as an accompaniment of mental disease, and for a long time I have been experimenting with various therapeutic agents recommended for the treatment of menstrual disorders without obtaining perfect satisfaction from any, until I tried the method of treatment which I am about to describe.

What I was looking for was a safe and efficient emmenagogue, which gave positive results in cases of amenorrhea, dysmenorrhea, and suppressed menstruation, without either exciting or depressing the patient, without causing any disturbances on the part of the digestive tract, or the urinary tract, such as are met with in the use of most of the remedies classed as emmenagogues.

I knew that apiol, the active principle of Apium petroselinum, linne (parsley), was a substance that had been long known to possess marked emmenagogue properties, but that had not been used extensively in this country on account of certain unpleasant after-effects connected with its administration. On investigation, I found that apiol was first isolated by Joret and Homolle in 1855, and was at first recommended for malaria, as a substitute for that specific of specifics—quinine. Later its emmenagogue virtues became known, but it found far less favor in this country than in France, the American physicians being especially prone to reject any remedy that has disagreeable after-effects. Apiol seemed to me the ideal emmenagogue, and I was even tempted to try it, administering it in some way as to neutralize its irritant action, when I came across a statement in an article on the subject, to the effect that the apiol of the market, no matter where purchased, was full of a series of impurities, and that the bad after-effects of this drug were due to these impure elements.

The ordinary apiol of commerce, it seemed, was simply a mixture of impure principles obtained from parsley by extraction The question was, therefore, to obtain such a preparation of apiol that eliminates the impurities that do the harmful work of the ordinary preparation. A number of chemists, in various countries have tried to purify apiol with varying success, but finally, within the last few years a pure product was obtained. It seems that the preparation which contains the purest product obtainable, which was prepared by the new process mentioned, is a pharmaceutical

compound known as Ergo-Apiol (Smith). Seeking, as I said, a preparation of apiol which would give satisfactory results in amenorrhea, dysmenorrhea, and suppressed menstruation, especially in the insane, and that would not produce any undesirable after-effects, I determined to try Ergo-Apiol (Smith), a liquid substance dispensed in gelatine capsules, which contains the pure apiol described above, and in addition to a combination of emmenagogues that immediately appealed to me as calculated to enhance the efficiency of the whole remedy, namely ergot of rye, oil of savin and aloin.

I selected a series of cases in the hospital, each of which was characterized by a more or less pronounced menstrual disorder of some standing, and administered no other medication for the treatment of the disordered menstruation than Ergo-Apiol. I cite, in illustration, three cases in which the remedy in question was employed. They are only examples of the experience I had with it.

CASE 1.—Miss V. F., aged twenty-one years, was admitted June, 1901. She said she had not menstruated for nearly a year, and attributed her suffering in body and mind to this fact. She was despondent, and on the verge of committing suicide. The reflex effects of the uterine disturbance were also manifested by the derangement of function in nearly all the organs. There was entire loss of appetite and a practical cessation of digestion, accompanied by pain after eating. In October, 1901, I began to give her two capsules of Ergo-Apiol (Smith) three times a day until after her expected periods, without any effect. During the month of November I gave her two capsules three times a day and continued the treatment until December 12th, 1901, when her menstruation returned in a perfectly normal manner. No unpleasant after-effects whatever were noted at any time during the treatment. She improved both mentally and physically during the time of taking the emmenagogue, and her condition was so remarkably ameliorated that she was discharged cured when the menstrual function had been re-established.

CASE 2.—Miss M. B. S., aged twenty-four years, had been suffering from amenorrhea for a year, which persisted in spite of all treatment. She was melancholy, and had a very poor appetite and other disturbances due to her suppressed menstruation. In November, 1901, I began giving her two capsules of Ergo-Apiol (Smith) three times a day. I continued this treatment without any appreciable effect, except that the patient seemed to feel more comfortable, and at certain times during the month she experienced the subjective sensations accompanying the onset of menstruation. Finally, her menses returned on April 21st, 1902. The menstruation was perfectly normal. One week before the

next succeeding period I gave her two capsules of Ergo-Apiol (Smith) three times a day, and when the time came for the onset of the flow it appeared in a normal manner. The remedy was continued in doses of one capsule three times a day while the flow lasted. Since the re-establishment of her normal function the patient has gained both mentally and physically, and regained her mental balance and her usual cheerfulness, so that she was discharged cured.

CASE 3.—Miss L. D. C., aged fifteen years, a girl of fine physique, who had first menstruated at the age of nine years, but always very irregularly. The menstruation disappeared for a year and then returned. When admitted she was very irregular, with a scanty flow that lasted but one day, and was accompanied by severe pain in the head, loins and pelvis. A week before her expected period in January, 1902, I began giving her one capsule of Ergo-Apiol (Smith) three times a day. At the end of one week her menstruation returned, and lasted four days, the flow being normal in amount and accompanied by very little pain. The same treatment was pursued in February with similarly good results, and from that time on the function was fully established and remained so. There was a marked improvement in both physical and mental condition and she was discharged from the hospital cured.

From my experience with Ergo-Apiol (Smith) and from the experience of a number of other observers, whose findings are published in the literature of the past few years, this remedy represents an emmenagogue of the highest type of efficiency combined with the inestimable advantages of safety, trustworthiness and absence of any unpleasant after-effects. It is probable that Ergo-Apiol owes its efficiency to the particular type of apiol that it contains, the pure product from which all irritating and injurious impurities have been removed. But it is unquestionably also the accessory remedies, which enter into the combination that contribute to the efficiency of the whole. Ergo-Apiol was easily and agreeably taken by all the patients to whom I administered it, and in no case was there any nausea, eructation, or any other gastric disturbance. Unlike most other emmenagogues, it requires only small doses continued for a comparatively short time to bring about the desired therapeutic effects. Ergo-Apiol (Smith) has not only a stimulating effect upon the menstrual function in amenorrhea, but also a tonic effect upon the muscle fibres of the uterus, for after it has been administered for a few months, the uterus is almost always able to resume its function without any further aid from external sources.

In conclusion, I may note the fact that the treatment of amenorrhea in the insane is always a matter of greater difficulty than in persons with normal minds, and that a remedy that pro-

dúces perfect therapeutic results, such as I have noted with Ergo-Apiol (Smith) in insane women, may be expected to perform the same services even more promptly in the average case of amenorrhea as met with in ordinary family practice. This is proved conclusively in the numerous cases reported by various observers who employed Ergo-Apiol (Smith) in menstrual disorders, and a partial list of whose publications appear in the annexed bibliography. Ergo-Apiol in the shape of capsules administered three times daily in doses of one or two beginning a little before the expected menses, and continuing through the period, has proven the most efficient, prompt, safe, and pleasant emmenagogue that I have ever employed. My experience with the drug was such as to lead me to adopt it as a routine treatment in amenorrhea.

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Original Articles.

CROUP.

By Edwin Seaborn, M.D.,

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The essential feature of croup is a spasm of the muscles of the larynx, causing complete closure of the glottis, followed by a gradual opening.

While the glottis is closed respiration is stopped; while the glottis is in a partially opened state the respiration is noisy. The most important factor is closure of the glottis; but the most obvious, though least important, is the noisy respiration. The disease, croup, has thus been named from its most obvious symptom, and the remark that croup is a symptom and not a disease is just.

We shall not weary you with repetition of the symptom complex of croup, but treat it only under two headings:

1. Causes.
2. Treatment.

To understand the causes of croup we must understand some of the mechanism of respiration so far as it concerns the larynx.

The muscles of inspiration are stronger than the muscles of expiration and if the muscles of respiration, both inspiratory and expiratory, be stimulated at the same time the result is an inspiratory act, the expiratory muscles being overpowered.

The muscles of the larynx consist of two sets—those opening and those closing the glottis. Those closing the glottis are stronger than those opening it. If all the muscles of the larynx be stimu-

lated at the same time the result is closure of the glottis, the muscles that open the glottis being overpowered.

The result of stimulating all the muscles of respiration, and all the muscles of the larynx simultaneously, would be the closure of the glottis, the muscles at the same time straining to perform inspiration. This is the condition present during the spasm in croup. The same condition may be produced by stimulating both parts of the respiratory centre.

The respiratory centre is situated in the medulla, close to the roots of origin of the glosso-pharyngeal, pneumogastric and spinal accessory nerves. It has a complex function over two groups of muscles: the muscles opening the glottis and of inspiration, on the one hand; on the other hand, the muscles closing the glottis and of expiration.

Now the centre is automatic, but partly controlled by higher centres in the brain. It is also reflexly affected by any nerves of the body (all having some remote connection with it), but more especially by the glosso-pharyngeal, pneumogastric and medullar part of the spinal accessory.

Thus we have to consider the centre itself, the higher centres controlling it, and the nerves affecting it; and any disease of either of these may unbalance the respiration and produce croup among a great number of other symptoms.

Of the respiratory centre we may have hemorrhage or degenerations producing croup. These must be exceedingly rare, except in the miliary hemorrhages of hydrophobia. In locomotor ataxia the laryngeal crisis may be attributed possibly to derangement of this part of respiratory centre.

Diseases of higher respiratory centres may produce croup. Thus we have the epileptic cry produced by spasm of the glottis, or the croup of hysteria, or the barking cough of boys at puberty, generally brought on by masturbation, or the neurosis of the larynx, equivalent to writer's cramp, and brought on by talking; a common form is that associated with malnutrition of rickets. This is seen in children up to two years of age and is so common that it has been given a special name, laryngismus stridulus. In this disease there is associated contraction of many other muscles and may end in general convulsions. If a person be strangulated from any cause, he suffers at the last from general convulsions and it is doubtful if the convulsions of laryngismus stridulus differ from those of strangulation. Laryngismus stridulus is primarily a neurosis, and is classified with hysteria and epilepsy.

Nerves directly affecting the respiratory centre are the glosso-pharyngeal, pneumogastric and medullary portion of the spinal accessory.

Irritation of these nerves in any part of their course, or distribution, may produce croup. They may be irritated close to the

brain, by tumors of the membranes, aneurism of the vertebral artery and by disease of the bones forming the jugular foramen ; in their course in the neck or chest by trauma, tumors or enlarged glands. The sensory branches (the only ones with which we are at present concerned, as they are the ones which can affect the centre) are distributed as follows: the glosso-pharyngeal to the mucous membrane of the back of the tongue, the soft palate, tonsils, eustachian tube, middle ear and upper part of the pharynx. The pneumogastric, with the medullar part of the spinal accessory to the mucous membrane of external auditory meatus, the lower part of pharynx, the larynx, esophagus and stomach. Any disease of these mucous membranes may produce croup, but by far the most common source of the irritation is in the larynx. This is what might be expected, as the larynx is the most sensitive of mucous membranes. By this I mean that a slight irritation will produce more reflex action than in any other part of the body. The normal reflex action is cough, which effects the removal of the irritant. Croup is not the product of a normal reflex action, since it does not tend toward the preservation of the organism. It would appear then, that in croup, there is a lack of control of the higher centres over the respiratory centre.

Treatment may be directed to any part of the nervous system involved in the reflex action, *i.e.*, mucous membrane, afferent nerve centre, higher centre, efferent nerve or muscle.

Speaking generally, we may say that it is the mucous membrane and the higher nervous centres that are at fault, and treatment will be most often directed to them—in the mucous membrane to removing the irritant, as foreign body in the ear, adenoids of pharynx, enlarged tonsils, or to laryngeal catarrh by means of sprays, etc., or the immediate application of hot or cold compresses, or to the stomach by giving emetics, or to the intestines by giving laxatives.

When the higher centres are at fault, treatment will be directed to the toning of the body in general, by the use of tonics, and particularly of the quality and quantity of the food.

The nerve trunks may be treated by removal of tumors or enlarged glands, and exceptionally by galvanism.

The muscles, by drugs which depress muscle, such as ipecac, or by the application of heat or cold.

As there are usually two elements in croup, the neurotic and the inflammatory, we may place it in a list of diseases bearing some indefinite relation to each other—with the purely neurotic at one end and the purely inflammatory at the other. These are epilepsy, hysteria, migraine, erythema, purpura, rheumatism, tonsillitis, croup, asthma, whooping cough, laryngitis, bronchitis, and pneumonia. To understand the relation of these diseases to each other would be to understand medicine.

THE STATUS OF SUPRARENAL THERAPY.*

By Samuel Floersheim, M.D., New York City.

So much has been written and spoken of in relation to the uses of the suprarenal that one knows not where to begin. The history of suprarenal therapy has been amply covered by different observers, and it is needless for me to waste any more time than to simply mention the fact. As my time is limited I hope you will abide with me when I pass rapidly over most of the parts and give but a synopsis of each portion.

Suprarenal is not a new drug. It is an old one, but owing to an inert preparation, the use of the drug was discontinued and fell into oblivion until 1892, when Dr. W. H. Bates, of New York, revived it. Some few years after this, Dr Bates had much trouble in enlisting medical men to experiment with the remedy and note its relative value as a therapeutic agent in the different diseases. At times he said he was most discouraged and despaired of ever getting one to use the drug. By his persistent efforts he has now succeeded in putting to work the whole civilized world. So wonderful are the properties and uses of this drug that in but an exceedingly short time it has become one of the most widely known and most important in use. Upon hundreds of thousands of cases has the drug been administered internally or applied locally. It is a strange coincidence that in the immense amount of literature, commercial or otherwise, papers and lectures that have been published within the past two years, there has not been mentioned once the name of that indefatigable and painstaking worker, Dr. W. H. Bates, of New York, through whose untiring efforts, unassisted except by repeated antagonistic remarks and stumbling-blocks placed in his road, all the civilized nations have become acquainted with so wonderful, invaluable and now indispensable a remedy.

I am convinced that the revival of this valuable drug is one of the greatest achievements of the past fifteen years. It would please me to cite the good work of the many ardent workers on this drug, but it would take up too much time and space. Suffice it to say that it has been conclusively proven by different observers in different parts of the world that the suprarenal extract and its active principle are not only of benefit but also of undoubted great value as an addition to our therapeutic armamentarium. Over

*Read before the ninety-ninth annual meeting of the New York State Medical Society, at Albany, Jan. 31st, Feb. 1st and 2nd, 1905.

three years ago I sent out over eight hundred communications to all parts of the civilized world requesting reports, favorable or unfavorable, from the internal administration of the suprarenal. I received but eight replies stating that my letter was duly received and that it would shortly be published. Up to this late day I have not received personally, from this source, one report of a case treated with the drug.

In the *New York Medical Journal* for October 6th, 1900, I published my first paper, entitled "The Use of the Suprarenal in Organic Diseases of the Heart—a preliminary report." In the same journal, in 1901, I published an exhaustive report on its use in organic heart disease. In the *Medical News* for January 4th, 1902, I published forty-five cases of hemorrhages from various causes treated with the suprarenal. In the *New York Medical Record* for November 17th, 1900, I published a report on the use of the suprarenal in diseases of the lower air passages.

Preparations.—We have the dried and powdered suprarenal substance, which is designated as suprarenal extract. We also have the alkaloid, better termed the active principle, which is called adrenalin. Solutions of the suprarenal extract do not keep, but solutions of adrenalin chlorid keep indefinitely, are reliable, and are non-irritating. Whenever in the future I speak of only suprarenal as such I also mean adrenalin chlorid.

Administration.—The powder is administered internally in three grain doses either as a powder or, better, in capsule form. The active principle is administered internally in the form of a solution, the strength of which is 1:10,000 to 1:1,000, in doses of from five to fifteen drops. To get the best results it should be administered frequently—from one to three hours or oftener, as the case may require. The solution is dropped on or beneath the tongue for very rapid effects, or it can be swallowed. Some now advocate to use it hypodermatically and by electrolysis. As to the hypodermatic use of the drug I believe it is unnecessary and I have never been in favor of its use. If an adrenalin preparation is at hand, a few drops can be rapidly placed on or under the tongue and its action will become apparent in about the time it takes to get a hypodermatic syringe ready for action. An effect was produced within twenty seconds when adrenalin chlorid was dropped under the tongue. Most all of you know that when you are in a great hurry, the syringe often fails to work properly and much valuable time is lost. I have read in literature that the hypodermatic administration of the solution (otherwise called the subcutaneous injection) had been given in collapse and the site of the injection was often very painful and that this form of administration was dangerous. Solutions in the strength of 1:10,000 have been known to cause great irritation while stronger solutions have given rise to gangrene and subsequent sloughing.

Some state that they have used it hypodermatically without any deleterious results. Those who have not advised subcutaneous administration advise intravenous injection, but they also state that when adenalin solution is given by mouth very rapid and beneficial effects are obtained with no danger whatever to keep the physician on his guard when he so administers it. Why then, if we get very rapid results (often within twenty seconds) when it is given by mouth without the least danger to cause us any anxiety, should one use the hypodermatic or intravenous method with such dangers as are above portrayed?

Surgically it is applied locally to the mucous membrane of the eye, ear, nose, throat, urethra, bladder, etc., in a strength of 1:5,000 to 1:30,000, with or without the addition of other remedies as the case may indicate. Some drugs destroy the active properties of the active principle in solution. Those most often employed, and which do not materially affect its valuable and powerful properties, are cocain, boric acid and normal salt solution. Cyanid and bichlorid of mercury, zinc sulphate, pilocarpin, hydrochlorate and many others have been used in the same solution, but I believe it is better to restrict, up to the present time, the addition to the three previous mentioned.

Contra-Indications.—It has none.

Diseases Treated.—The diseases in which the suprarenal was administered by me and the results published, were in all forms of organic heart diseases, tracheitis, acute and chronic bronchitis, bronchial asthma, congestion and edema of the lungs, pneumonia, hemoptysis, pulmonary tuberculosis, hemorrhage from the uterus from various causes, such as complete and incomplete abortions, benign and malignant tumors, post-partum hemorrhage, metrorrhagia, menorrhagia, atonic conditions and at menopause. I have also employed it in hematemesis, hematuria, in threatened attack of apoplexy and in apoplectic seizures. The suprarenal, and more lately, the adrenalin chlorid solution has been used by many observers both medicinally and surgically in diseases of the eye, ear, nose, throat, larynx, in genito-urinary work, including the kidneys, in scarlatinal angina, asphyxia neonatorum, anesthetic collapse, angioneurotic edema, edema of the glottis, hemorrhoids, hemorrhagic fecal fistula, gastro-intestinal hemorrhage, goitre, gonorrhea, lupus, morphine and carbolic acid poisoning, ulcer of the stomach, for lost voice and for diagnostic purposes. To simmer it down, the suprarenal extract and its active principle are of value in organic heart disease, for performing bloodless operations, in most of the diseases ending in -itis, as an astringent and as a hemostatic in hemorrhages generally.

Heart.—The suprarenal is one of the most valuable of remedies in organic heart disease. When other drugs, including strychnine and digitalis have failed to be of any benefit, the solution of

adrenalin chlorid has given marked beneficial results. A detailed account of its action can be found in one of my published papers. Adrenalin chlorid has been used in pneumonia as a heart stimulant to tide the patient over a critical period.

Lungs.—The suprarenal has often been of great assistance in relieving the symptoms of a stubborn laryngitis, tracheitis and bronchitis when many drugs failed to benefit. In congestion and edema and bronchical asthma, the administration of the suprarenal has helped to tide the patient over a critical period, and often was the only remedy administered. In pneumonia it was given for its stimulating effects on the heart, and for hemorrhages whenever the latter were present. In pulmonary tuberculosis it was administered chiefly to lessen the severity of the cough, to decrease the quantity of the expectoration, to clear the throat, to strengthen the heart, and tone up the patient generally. In hemoptysis, from whatever cause, the administration of the remedy gave rapid evidence of its powerful, yet harmless, effects.

Hemorrhages.—As a hemostatic the suprarenal preparations have no equal. They do the work when all other measures fail to benefit. In hemorrhages from most any portion of the body, the internal administration of the drug was most always followed by beneficial results. Some few cases were not benefited by the suprarenal powder, but on administering the solution of adrenalin, these cases were benefited. Surgical, traumatic or so-called idiopathic hemorrhages, unless they are from large blood vessels, are most always instantly checked by the local application of the drug. So powerful and so rapid are the properties of this greatly lauded remedy, that with its help we are enabled to operate, should an operation be indicated, upon those poor, unfortunate individuals, the bleeders, without that dreaded danger of repeated, severe, and in many cases uncontrollable hemorrhages. Secondary hemorrhages, at first so often reported and dreaded after the use of the solution of adrenalin chlorid, I believe need not cause any further anxiety. Generally speaking, they are not any more frequent than before the drug was employed.

Apoplexy.—The timely internal administration of adrenalin chlorid had, to my mind, prevented a number of attacks of true apoplexy. I can now recall the histories of six cases in which the symptoms were such as indicated that an attack of apoplexy was imminent. Adrenalin chlorid solution was administered, and the threatening symptoms rapidly passed away. All danger of an attack of apoplexy was apparently avoided. Some few weeks to months afterwards, I was informed by one of the family that the same patient was later very suddenly taken ill with exactly the same symptoms, and the family called in another physician, who administered a much different medicine. The result was that the patient died within a short time, Adrenalin might and might

not have saved these patients during their last attack, but I have had patients with more than one attack who were markedly benefited by the administration of adrenalin chlorid.

Uterus.—Hemorrhages from various causes, such as menorrhagia, metrorrhagia, at the menopause, malignant and benign growths, atonicity, complete and incomplete abortions, post-partum hemorrhage, idiopathic (so-called) hemorrhage, and also from persistent oozing after curetting. Dr. George Tucker Harrison, in a paper before the New York County Medical Association said, "Why should we endanger the life of a woman from infection, who is suffering from uterine hemorrhage by the local application of suprarenal extract to the interior of the uterus, when it acts almost as rapidly and as powerfully when administered by mouth without the slightest danger of causing infection?" Adrenalin chlorid has been used to diminish the size of an enlarged uterus.

Stomach and Intestines.—Hematemesis from all causes has been rapidly checked by the internal administration of the suprarenal powder. A few cases failed to be benefited by the powder, but on administering the adrenalin chlorid solution, immediate and permanent relief was afforded. In hemorrhage from the intestines from all causes, from fecal fistula, hemorrhoids and ulcers of the rectum, it has given good results. It has also been reported to have been administered in cases of appendicitis, but I am not aware of the ultimate results.

Eye.—The use of adrenalin chlorid has given wonderful results in diseases of the eye. The value of the remedy in diseases of the eye is as a hemostatic and astringent in acute and chronic conjunctivitis, keratitis, choroiditis, and most all the other diseases that end in -itis; in gonorrheal ophthalmia, glaucoma, in inflammation of the appendages. Cancer of the lid has been reported to have been cured by its use. As a surgical aid it has given most remarkable service as a hemostatic, controlling hemorrhage, except from large blood vessels, thus enabling the operator to proceed with much more rapidity in his work, with greater precision, and also, of no less importance, the saving of the patient's sanguine fluid, which is quite essential in many of the patients operated upon, especially those operated upon in the nose. With the aid of this drug an operator on the eye, ear, nose, throat, and for the usual minor surgical work, can be rightly called the "bloodless surgeon," and with the addition of cocaine to his armamentarium, we can, add the "painless surgeon."

Ear.—Adrenalin chlorid is chiefly used as an astringent in congestion of the auditory canal, the membrana tympani, in the eustachian tube and in inflammations generally in the middle ear. They are also used to check hemorrhages from traumatism and to prevent hemorrhages during surgical operations. Polypi have been considerably reduced in size from the constant application of

the drug. For severe congestion of ear, to make the tube permeable and by permitting free drainage, thereby giving relief to the patient. It has also been used to relieve tinnitus aurium with success when all other remedies had failed.

Nose.—The local application of adrenalin chlorid has given marked benefit, and when all other remedies had failed to give relief it worked wonders. Medicinally it has been employed in hay fever, otherwise called hay asthma, atrophic and hypertrophic rhinitis, edema and congestion. Surgically it acts as the most powerful hemostatic in hemorrhages from small blood vessels from various causes. It is most extensively employed to perform bloodless operations on the nose and for the same reasons as in the eye. Continuous applications have caused a decrease in size of polypi. Reports from medical men who do special work on the nose and throat, have reported secondary hemorrhages from its use, after operations, but I believe that the hemorrhages have not been more frequent than before the drug was employed.

Throat.—The suprarenal is mostly employed as a hemostatic, whether the etiological factor has been external violence or is going to be a surgical procedure. In catarrhal conditions it is used as an astringent of great value.

Genito-Urinary.—In hematuria either from the bladder, kidneys or urethra the use of adrenalin chlorid administered internally or applied locally as a hemostatic has been followed by prompt beneficial effects. In strictures, when the passage of sounds was almost impossible, the instillation of adrenalin chlorid enabled the passage of the instruments, and even larger sized ones with comparative ease. It has been employed to reduce congestion of the prostate.

Operations Generally.—It has been extensively employed in operations genera ly as a hemostatic of exceedingly great value, especially in conjunction with cocaine, chiefly for the purpose of preventing hemorrhage. Operators have used the adrenalin chlorid in operations upon the eye, ear, nose, throat, larynx, rectum, genito-urinary, navel, benign and malignant tumors, and whenever oozing, moderate hemorrhages are to be prevented. It thereby enables one to do clean work which previously were extremely bloody and gave a grave aspect to the case. It also enables the operator to inspect his field of operation without hindrance from hemorrhage.

Chloroform Syncope.—Collapse and Shock.—Adrenalin chlorid has been administered with good and rapid results. Given before chloroform anesthesia it acts as a preventative to cardiac syncope. Administered in drop doses of 1 : 1,000 solution into the mouth during the course of chloroform anesthesia obviates all danger of unforeseen cardiac weakness or embarrassment. You are to understand that chloroform cannot be used indiscriminately, the signs

and symptoms of shock neglected while adrenalin is being administered and still think you are on the safe side. Adrenalin chlorid will act wonderfully in a failing heart and respiration when there is evidence of weakness, but when there is neglect and indiscriminate use of so powerful a drug as chloroform, with so depressant action, seldom anything is of any avail. Care in anesthesia must be the watchword first and always. I hope I make this plain to you all.

Purpura Hemorrhagica.—Adrenalin chlorid has been of benefit in this disease. When the drug was administered internally further progress of the drug was rapidly checked and convalescence was rapidly established.

In conclusion, I wish to say that we may well be surprised when we reflect but a moment that with so powerful a remedy at our command and so extensively employed, no case of poisoning or great anxiety has ever been observed when it had been properly employed.

Selected Article.

PRACTICAL NOTES ON OINTMENTS, THEIR USE AND ABUSE.*

By L. Duncan Bulkley, A.M., M.D.

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From time immemorial ointments have been employed in treating diseases of the skin, and the numerous references to them in the Bible show how highly they were esteemed. One reference, namely, "Dead flies cause the ointment of the apothecary to send forth a stinking flavor," refers to an important point to be considered—that is, the freshness or rancidity of ointments.

While it might seem a simple and easy matter to prescribe an ointment for a diseased condition, any one who has dealt much with diseases of the skin not only often recognizes the difficulties connected therewith, but sees continually the uselessness or harm of many that have been previously prescribed for patients by others. A practical study of the subject, therefore, may aid some in avoiding certain of the errors which continually occur in this line of therapeutics. The subject is a larger one than can properly be treated of in a single paper, and many important matters must be very briefly considered.

The United States Dispensatory contains formulæ for over fifty ointments for various purposes, many of which are well known and are of value, as recommended, but some are too weak and many of them are far too strong for ordinary use, unless diluted. It is, therefore, hardly safe to always rely on the directions there given in regard to the use of ointments in diseases of the skin.

Bases for Ointments.

The first requisite for a good ointment for the skin is that its base shall be non-irritating and of a proper consistency, and

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the tendency of many ointments to become rancid should never be forgotten by the physician. This will sometimes happen through the carelessness of the druggist, more often by that of patients in keeping them too long. Not infrequently an old ointment will prove irritating when one freshly and properly prepared, with the same ingredients, will prove serviceable.

Lard is a common base of very many of the ointments of the dispensatory, and to prevent its rancidity it is commonly treated with about 2 per cent. of benzoin, or originally the tincture of benzoin was added. This latter may prove irritating to the skin, and sometimes the lard is imperfectly benzoinated and will not keep.

Wax and oils also often enter as ingredients, which may likewise tend to rancidity. The petroleum products, paraffin, vaselin, albolene, etc., are also used considerably as bases, but it must be remembered that vaselin is not acceptable to every skin. Not at all infrequently an ointment made up with it will prove irritating, when the same ingredients with another base will be satisfactory.

Vaselin and albolene are often of value when it is desired to have only a lubricant, or a soft ointment to penetrate, as in the hairy scalp, but as a protective ointment it does not answer, unless materially stiffened with powder, as in the Lassar paste, or with wax, paraffin, or lanolin.

Lanolin is rarely suitable as a base alone. At one time it was thought that it would be valuable as promoting absorption, when this was desired, but experiments have shown that it is far inferior to vaselin in this direction. Glycerite of starch often serves excellently as an excipient in irritable conditions, and also for general inunction after bathing, in dry conditions of the skin; but the susceptibility of some skins to glycerine must always be borne in mind, for to some it proves an irritant. Mutton tallow melted and thoroughly incorporated with enough oil makes an excellent inunction for dry, harsh skin. Goose grease has been highly praised as an excipient, especially for parasiticides in the vegetable parasitic diseases. The newer proprietary bases, vasogen and endermol, serve good purposes and appear to be bland and unirritating.

Perhaps the most serviceable base for most ointments is cold cream, or the unguentum aquæ rosæ of the Pharmacopeia; but care must be exercised that it is well made, and that it is fresh, as it is liable to become rancid, and the water in it to evaporate. A little carbolic acid, 1 to 2 per cent. will preserve it for a considerable length of time.

A word in regard to diachylon ointment, so commonly associated with the name of Professor Hebra of Vienna. As directed now to be made, by melting together equal parts of lead plaster and olive oil, it is not as serviceable as that made after Hebra's original formula, for the oil is not decomposed in the process. Hebra advised that the ointment be made direct from the litharge, olive oil, and water, the two latter in very much larger quantities, and the water double that of the oil. The water and oil are boiled, with constant stirring, and the litharge sifted in and the whole stirred until a good soft ointment is made.

Ingredients of Ointments.

While many of the standard ointments, as those of zinc, mercury, sulphur, etc., are of more or less value, used alone, undoubtedly much gain can be had by a proper and judicious combining of various ingredients to suit individual cases; although sometimes prescriptions are seen exhibiting a marvellous polypharmacy, useless if not harmful. The addition of carbolic acid, 1 or 2 per cent., is a most valuable adjuvant to many ointments, and ichthyol, 6 to 12 per cent., is also of great value as an antipruritic, as is also oil of cade. Salicylic acid is also serviceable as a promoter of the growth of healthy epithelium, and may be added to various ointments in a strength of from 3 to 6 per cent.

Many illustrations could be given of the advantage of combinations of ingredients in ointment. Perhaps the most striking is in regard to what is often known as Wilkinson's ointment for scabies, which may be further improved by the addition of tar ointment and liquid storax. It must be remembered that the ingredients of ointments must often be changed to suit individual cases, and it is not always safe to take prescriptions, of ever so high an authority, without considering well the ingredients and their suitability to the diseased condition and the particular skin under treatment.

Compounding of Ointments.

The dispensatory is very clear in its general and special directions in regard to compounding ointments, but unfortunately, these are not always strictly followed, and one occasionally meets with ointments very poorly prepared. It is well, therefore, for the physician to inspect them from time to time, to be sure that they are fresh and perfectly prepared. The most common error is in having gritty particles, which are often most

irritating to the surface. I have seen an ointment of red oxide of mercury, ordered for use on the eyelids, in which there were hard, solid particles, suggesting red pepper, stirred into the base.

I have also frequently met with ointments in which there was much gritty substance, easily felt in rubbing them between the fingers. All mineral ingredients should be very thoroughly triturated in a mortar, with a few drops of oil, so as to make a fine paste, which is then thoroughly incorporated with the base. The more I see of practice the more I am convinced that a certain proportion of the want of success often occurring in connection with the treatment of diseases of the skin is owing to the faulty pharmaceutical prescriptions.

Strength of Ointments.

Both in health and disease individual skins differ very greatly in their reaction to external irritants, and one should always be cautious in making a first application to a skin with which there has been no previous personal experience. Irritation and harm is continually done to eruptions by too strong ointments, and it is always well to begin with a mild application, increasing the strength as indications occur. Undoubtedly the reputation which oxide of zinc ointment has acquired, and also possibly some of the patented and advertised ointments, lies in their bland, non-irritating character, which may be all that is required in any particular case.

One will make very little headway in treating most diseases of the skin who knows only oxide of zinc ointment, although with it alone he will probably do more good and less harm than with any other single ointment.

Properties of Ointments.

The strength and composition of ointments must naturally vary very greatly with the purpose for which they are employed, and this should always be kept distinctly in mind in the treatment of any cutaneous condition. Ointments may be required for several very different purposes, and, according to their composition, their action may be lubricating, protective, soothing, astringent, absorbent, stimulating, or anti-parasitic. All of them may prove healing according to the nature of the complaint and the condition of the skin. These actions may be briefly considered.

Lubricants.—In many instances only a lubricant is wanted,

and no mineral or other ingredients are required other than perhaps 1 or 2 per cent. of carbolic acid. Vaselin or albolene answers often very well, but a very valuable combination for general use is made as follows:

℞ Lanolini ..... ℥i.
Boroglycerini ..... ℥ss.
Unguenti Aquæ Rosæ ..... ℥iii.

An ointment of mutton tallow and olive or cod liver oil, which can be cheaply made at home, is very serviceable in ichthyosis and in conditions where large quantities are long to be used. Glycerite of starch is also very acceptable to many skins.

Protective.—The protective feature of an ointment is often a very important one, which will be spoken of more fully shortly, when considering the mode of application of ointments.

Soothing Properties.—In very many diseased conditions of the skin the soothing character of an ointment is that which is most required, and here it is that the ingenuity of the physician is often most severely taxed. Especially is this true when the element of itching is prominent, and when one remedy after another in ointment form will fail to give relief. In many of these instances some other application, in the form of a lotion or powder, will be more suitable.

In attempting to give relief from itching great care will often be necessary to avoid remedies which overstimulate the skin, for continually it will be seen that stronger and stronger applications are used with only irritating effect, when a mild, soothing ointment will accomplish better results, especially if rightly applied. Such ointment as the following will often give relief after much more powerful remedies have failed:

℞ Acidi Carbolici ..... gr. v.
Pulv. Calamini Prep. ..... ℈i.
Zinci Oxidi ..... ℥ss.
Ung. Aquæ Rosæ ..... ℥i.

℞ Ung. Picis ..... ℥ii.
Zinci Oxidi ..... ℥ss.
Ung. Aquæ Rosæ ..... ℥vi.

In increasing the strength of ointments great care should be exercised and the effect carefully noted.

Astringents.—In certain cases more of an astringent action is required, and tannin, ergot, lead, and bismuth may be added to meet different requirements.

Absorbents.—Again, an absorbent effect is often desired in an

ointment, and the preparations of iodine and mercury prove most valuable, as also tar and its various congeners.

Stimulants.—Stimulating ointments are also often called for, especially in more chronic conditions, and there are a large number of these which, however, must be used with caution and with a definite end in view.

Many of the ointments found in current literature may be thus classed, and while in skilled hands and applied just rightly, they can be used with safety and often with advantage; in a large share of ordinary cases they will often irritate the skin unnecessarily and be worse than useless.

Parasiticides.—Lastly, antiparasitic ointments often present considerable difficulty to those not greatly accustomed to their use, and frequently to the experienced it is a difficult matter to secure an effective ointment which is not too stimulating. Especially to the scalps of children the ointments often suggested are either too weak or too irritating. Chrysophanic acid, although a fairly efficient parasiticide, is being less and less used, owing to its objectionable staining of the skin, hair, and clothes. The iodine preparations and soluble mercurial ointments, such as the oleate and diluted citrine ointment, together with salicylic ointments, afford the best results.

Mode of Application.

The mode of application and removal of ointments are often very important matters, about which far too little thought is given, for these have much to do with their good or bad effect. It is rare to find that specific directions have been given to patients, and yet, as it is often their first experience in this procedure, it is hardly to be expected that they will understand exactly the way to apply them in order to get the best results. The usual direction is simply to apply some of the ointment morning and night; and very commonly patients will diligently wash off one application before the next one is made, and not infrequently their faulty method of treating the skin will do much to counteract the benefit from the ointment used.

The mode of application of an ointment must vary greatly according to the purpose for which it is used. Thus, when an ointment is used for lubricating, as in ichthyosis, xeroderma, or in a slight general eczematous state, the soft ointment should be taken on the palms and the body freely anointed, with friction, morning and night, until much of the ointment has been absorbed. Also in the treatment of scabies the appropriate ointment should be rubbed in, with the palms, over all the affected

parts, and even for half an hour, until it has well penetrated the furrows made by the insect, and a considerable quantity should be left on, so that the underclothing becomes pretty well saturated with it.

On the other hand, however, on a more or less raw, eczematous surface such a procedure would be anything but beneficial, and the ointment should be thickly spread on the woolly side of lint and firmly bound on the part with as light a gauze bandage as possible. The same is true when it is applied to such a lesion as pemphigus or an ulcerating surface. In this latter case, however, it is often well to spread the ointment on very thin layers of absorbent cotton, held on the hand, which may be made to fit an uneven surface, and on removal they will come off easier, without tearing the newly formed granulations. This method is also peculiarly satisfactory in eczema about the anus, and in hemorrhoids, as it can be well tucked in and keeps its position.

Between these two extremes there are varying degrees of active application of ointments, and patients must be instructed just how to use them or much of the benefit will be lost. Thus, in parasitic diseases of the scalp, after clipping the hair very short, it is often well to apply the ointment with a stiff stencil brush, with considerable friction, working it well into the follicles, and the same mode of application is valuable in hard patches of psoriasis on all parts of the body.

Again, in old patches of eczema there is often much benefit from a greater or less friction with the finger, or often with a bit of flannel with the ointment, after which the patch is covered with the same spread on the woolly side of lint and bound firmly in place. In many cases of eczema or psoriasis about the hands it is almost impossible to make any progress unless the proper ointment is kept bound on the affected part all the time, night and day, for a while.

In itching conditions it may be necessary to renew the applications of ointment many times daily, and in eczema of small children the direction should be to replace it as often as it is rubbed off or the dressing becomes at all deranged.

In general itchy conditions, as pruritus and urticaria, it may be necessary to make applications of an antipruritic ointment many times day and night.

Often one sees very poor results in the using of ointments, resulting from the coverings or dressings which are placed over them. It is not at all uncommon to see a diseased surface to which ointment has been applied, covered with old linen or surgical gauze, which readily absorbs the greasy portion of the oint-

ment very shortly, and leaves the affected portion dry, perhaps coated only with the mineral or other ingredient. This is not at all conducive to the healing of the part.

As has been already mentioned, the best results are obtained when the proper ointment has been spread thickly on the woolly side of surgical lint, or spread on very thin layers of absorbent cotton, and bound firmly on the part.

Many errors continually occur unless careful and explicit directions are given by the physician in regard to the removal of ointments and the subsequent treatment of the diseased surface. It seems to be the universal idea that such should be frequently washed, and one continually finds healing prevented by the application of soap and water, daily or oftener, when with proper use of the same ointment good results followed.

Rarely is it advisable to wash surfaces which are at all raw, and all the cleansing necessary may be accomplished by the gentlest wiping with absorbent cotton. Much harm is also often done by a rough removal of ointments and dressings. When the latter adhere too closely it is generally because there has been too little ointment used or an improper covering made. If on removal of a dressing there is much ointment on the skin which it is desirable to remove, this can often be best accomplished by means of a dull knife, if gentle wiping with absorbent cotton is not effective.

Indications and Contraindications for the Use of Ointments.

It is not always an easy matter to know just the exact indications for the employment of this or that kind or strength of ointment, or for any ointment, in preference to some other kind of dressing, and disappointment will occasionally follow the best directed efforts. In some acute inflammatory conditions of the skin lotions and powders suit far better than ointments of any kind, while in the more chronic conditions, with dry, rough skins, ointments are, of course, called for.

The exact kind and strength of ointment can be determined only after a careful study of the skin, lesions present, and their acute or chronic state or condition, and also after a full appreciation of the character of the skin of the individual under treatment.

In general, a thin, delicate skin, especially in one with a light complexion and hair, will bear and require much milder applications than a thick, tough skin, especially in a brunette.

The single or localized patch of chronic eruption will, of

course, bear and require much stronger applications than an acute or generalized eruption. While the sensations of the patient will commonly determine the continuance or disuse of an ointment, and great harm is often done by too strong applications, our efforts should undoubtedly be directed to securing an application which will be effective and accomplish the end desired, if that be at all possible.

Every point in a case should, therefore, be carefully weighed and the indications and contraindications looked for and appreciated, before determination is made as to the proper ointment to apply. The almost universal use of zinc ointment is largely explained by its relative harmlessness, on the principle of the Irishman's holy water, who explained that, "if it does you no good it will do you no harm." This, however, is a poor principle to go on in the treatment of diseases of the skin, which often require very active measures for their removal; and, as before remarked, he is very poorly equipped for their treatment who knows only zinc ointment.

In concluding these brief practical notes on the use and abuse of ointments, for the general physician, I must utter the caution that we have been considering only one side of the great subject of the treatment of diseases of the skin, and one which is often the least important. All local measures are constantly found to be ineffective unless proper and adequate internal and general treatment is adopted and earnestly and faithfully carried out.—*Merck's Archives.*

Clinical Department.

Fracture of the Astragalus. MONTGOMERY RUSSELL, M.D., Seattle, Wash., in *Northwest Medicine.*

Fracture of this bone is very rare; it usually results from falls, the weight of the body striking upon one foot.

Symptoms.—If there is no marked displacement of the fragments, the diagnosis is extremely difficult, the strong ligamentous attachments of the bone usually preventing much displacement. The diagnosis is made by the presence of persistent pain, inability to bear pressure on the foot, rapid swelling, and by eliciting crepitus by flexing, extending, abducting or adducting the foot. Where there is marked deformity the diagnosis is not difficult, but in most cases a positive diagnosis can only be made by the use of the X-ray.

Treatment.—If there is displacement of the fragments the leg should be flexed from the thigh, and deformity should be reduced by extension, counter-extension, and manipulation, the foot being subsequently fixed in an extended position at a right angle to the leg. There is, however, usually such marked swelling following this fracture, that much manipulation, or the application of an immovable dressing, is not desirable for at least a week or ten days. After reduction of the swelling, a plaster-of-Paris dressing should be applied and retained for about six weeks. More or less impairment in the motion of the ankle joint is apt to result, and great care should be exercised that the foot is kept as nearly as possible at a right angle to the leg, for in this position the foot will be most useful if ankylosis should occur.

Compound fractures of the astragalus are very serious injuries, and generally demand excision or amputation.

Patient, Mrs. G.; age twenty-seven years. On September 4th, 1904, while riding in heavy road wagon, up a hill, the horses became frightened and backed the wagon down over an embankment at the side of the hill, the wagon upsetting and throwing her violently to the ground. She struck the ground with her full weight on the left foot, the wagon evidently falling across her foot, as there was a mark on the skin over the external malleolus and this bone seemed to be forced down on to the astragalus. I was called to attend her the day following the accident and found her foot and ankle greatly swollen, much

inflamed, very sensitive to the touch and constantly pained her. I also noticed blebs on the skin over the injured area and, on a more thorough examination, elicited crepitus, but was not able to tell what bone was fractured, only being able to make a positive diagnosis by the use of the X-ray.

This being a serious accident and one requiring constant attention, for a time at least, and as the patient was at a ranch across Lake Washington, where she had been spending the summer, I advised her immediate removal to the hospital, where, after using appropriate treatment for about a week to diminish the swelling, I put the foot in a plaster-of-Paris dressing, being careful to fix it as nearly as possible at a right angle to the leg. This dressing I removed after about two weeks, replacing it immediately with another similar dressing, and allowing this last to remain about four weeks longer, the patient in the meantime getting about on crutches, and, in fact, going back to the ranch, where she could remain just as quietly as at the hospital and her general health would not suffer. After removal of the last dressing I found almost complete ankylosis of the ankle joint, and advised gentle massage to overcome it as much as possible. This was continued for about two weeks, with only, however, partial success, the formation of new bone, as shown by the skiagraph, preventing complete limbering of the joint. I now had the patient, while using her crutches, put more weight on the foot each day, finally having her discard the crutches, using only a cane for support, the foot in the meantime improving quite rapidly until she could, by December 15th, about three months after the accident, walk without the aid of either crutches or cane, and with only a very slightly perceptible limp.

Four months after the injury she attended a dancing party and danced several numbers. In the course of six months or a year, the chances are quite favorable that she will be able to walk with scarcely any lameness.

Report of a Case of Purpura Hemorrhagica. By Donald Churchill, M.D., Providence, R.I., Surgeon to Out Patients, Rhode Island Hospital, in the *International Journal of Surgery*.

E. D., aged twenty-eight years, white, married, born in New York and living in this city, was seen for me by Dr. Cutts about 8.30 p.m., January 6th, 1903. He found her suffering from severe pain in both legs from the ankles to the knees. This had

come on suddenly, and had lasted about three hours. Examination showed some swelling and slight tenderness, particularly over the tibiæ. There were many faintly purple subcutaneous spots over both legs from the ankles to the knees, varying in diameter from 2 to 5 mm. Her temperature was 99 deg., and her pulse 72. An aluminum acetate dressing was applied to the legs. She was given five grains of calomel, and small doses of quinine and acetanilid.

I saw her the next morning about 9.30. Her face was very much swollen and covered with purple spots, while the nose was purple from its tip to its base, giving the appearance of an extensive ecchymosis. The spots on the legs were larger, being from 2 to 3 cm. in diameter, while many of them had become confluent. The temperature was 101 deg., and the pulse 100. There was no pain in the legs, but the pain in the face, and especially about the nose, was very severe. The urine was always free from albumin and sugar, but heavy with urates at first, later becoming in all respects normal.

The following day there was much pain in the arms and hands, which were covered with purple spots and large confluent purple areas. The scleræ were purple. There were some smaller spots on the chest, back and front. The legs presented colors varying from a dirty yellow and faded purple, to the larger coalesced areas in which no separate spots could be found. The face was also universally purple, the teeth ached, and the gums were tender.

At 5 p.m. I was hastily summoned, as the patient was said to be breathing with great difficulty. On my arrival at 5.30 I found that about 5.15, after a severe strangling fit, she had coughed up a clot of blood. This was followed by immediate relief from the dyspnea. At 8.30 p.m. the buttocks were covered with purpuric spots and elevated areas which much resembled urticarial wheals. The abdomen and thighs were also covered by purple spots. Temperature 102 deg., pulse 110. The patient was much frightened, as she feared she was becoming a colored woman. The subcutaneous hemorrhages were now universal. The mouth was sore.

The following morning, and the fourth of her illness, there were no new lesions, and all of the old ones were fading. The swelling of the face and legs was subsiding. There was, however, some bleeding from the gums, which, with the mucous membrane of the mouth and tongue, were purple. The breath was fetid. The teeth were not loose. The legs and face were

of a bronzed hue, the temperature was 102.6 deg., and the pulse 112.

Menstruation, which was exactly on time, had begun on the second day, and was not abnormally profuse. There was also some blood in the stools.

During the next seven days the eruption steadily faded, the swelling of the face and legs entirely disappeared, the temperature and pulse became normal, the soreness of the teeth and gums left her, menstruation ceased, and, save for a dusky appearance of the skin, she looked quite like herself. This duskiness lasted about seven days longer, gradually fading out. Her accustomed strength and color returned rapidly, and she was apparently well.

The patient's family history is negative. She had had one child, now a boy of four, and three miscarriages, all due, her former New York physicians have said, to a prolapsed left ovary. She had never had any illness or ailment except her miscarriages, and a peritonsillar abscess in August, 1902. There was no history of any venereal trouble. She is well developed and well nourished, with rosy lips and cheeks. She is five feet one inch in height, and weighs 128 pounds.

Her husband is a German, and with her son lived with her. They also were in perfect health. Their food was always fresh. Her husband was very fond of a soup or stew made invariably from fresh meat and fresh vegetables, insisting that it should be on his table every day. Salt and canned foods were almost unknown in the house.

Mrs. D. could not remember having taken any medicine of any kind, except for her tonsillar trouble five months before. Her treatment for the first four days was calomel and saline cathartics, cream of tartar water, and chlorodyne to control the pain. On the fifth day, which was after decided improvement had begun, at the suggestion of Dr. Kimball, who saw the case with me, six oranges daily and all the lemonade she could drink were added.

This very striking and unusual group of symptoms suggests, of course, but two things for differential diagnosis, *i.e.*, scurvy and purpura hemorrhagica.

All authorities agree that scurvy is a disorder peculiar to those who, for one reason or another, are obliged to subsist for lengthened periods of time on improper food, more particularly that from which fruit and fresh vegetables have been excluded; to respire vitiated air, and to endure such confinement as precludes the possibility of daily exercising the body. The disorder is, therefore, common in men, particularly those who fol-

low the sea on long voyages, Arctic explorers and others similarly situated. The disease is insidious in its onset. There is a progressive loss of weight and a developing weakness and pallor. The gums first become spongy, later bleed easily on pressure. The teeth usually become loose and occasionally drop out. The skin later becomes rough and dry, and the hemorrhages occur at first about the hair follicles.

Dr. Charles E. Banks, of the U.S. Marine Hospital Service, says: "A progressive upward and downward curve marks the course of a case of scurvy from its onset to its finish. It has no definite attack, no crisis; while there are no marked symptoms involving the nervous system, the depression is always noticeable, and the patient seems to be indifferent to his condition and surroundings."

Purpura hemorrhagica, or the morbus maculosus of Werlhof, Osler says, is more often met with in young women, especially delicate individuals, but cases are described in which the disease has attacked persons in full vigor.

H. C. Wood says: "The progress of this affection is that of an acute infectious disease." Its onset is almost always sudden.

Musser says: "It is distinguished from scurvy by the absence of antecedent debility and anemia, of spongy gums, of brawny induration of the limbs, and by the fact that the hemorrhages do not usually occur around a hair follicle. In scurvy there is a history of long deprivation of vegetable food, whereas purpura may occur in robust health."

Pain in the limbs, rise of temperature, and the purpuric spots, at first usually individual, finally coalescing into ecchymotic areas, are common to both diseases.

To return again to our case, Mrs. D. was apparently perfectly well in every particular, saving only a possible prolapsed ovary, up to the time she was seized with pain in the legs. She occupied rooms in a poor quarter of the city, but they were on the second story, and they were large, dry and airy. Her husband, her son, and two boarders were not affected. Her food was varied, fresh, and with a liberal amount of fruit and vegetables. She was active and out of doors every day, walking some distance. There were no gingival symptoms until the third day, and then although the gums bled they were not spongy and the teeth did not become loose or drop out. The skin of the legs was neither dry nor brawny. There were general hemorrhages from the mucous membranes of the mouth, tongue, trachea, scleræ, bowels, and a profuse menstruation. There was

no mental inactivity nor depression, but rather a hopeful attitude to a speedy recovery, and an active interest in her domestic affairs even when she was sickest. The hemorrhages did not begin around hair follicles, but anywhere and everywhere, rapidly coalescing into larger ecchymotic areas.

If this had been a case of scurvy, it must, *ipso facto*, have been due to food and general surroundings. Neither was in any way changed, yet her recovery was complete in three weeks. It therefore seems to me to be a perfectly logical and honest conclusion that we are fully justified in making an unqualified diagnosis of purpura hemorrhagica.

Some one may say, What difference does it make? Who cares whether it was scurvy or purpura? It is only a splitting of hairs.

Maybe it is. But, aside from the fact that one always likes to be as nearly diagnostically correct as possible, it does have a practical side to the attending physician.

All authorities agree that, if the proper hygienic conditions can be provided, cases of scurvy almost invariably recover. They are equally unanimous that cases of purpura often result fatally, and that it is a much more serious disease, as the etiology is unknown, and the cause cannot be so readily removed. And although this particular case fortunately recovered, nevertheless with a diagnosis of purpura hemorrhagica, and with the disease progressing so rapidly that on the third day there was a hemorrhagic edema of the trachea, I confess I did not feel so comfortable as I should have felt had it been a case of scurvy.

A Case of Paratyphoid Infection. Albert E. Taussig, M.D., of St. Louis, in the *Interstate Med. Jour.*

The following case, while unfortunately not completely worked out, is suggestive from some points of view, and therefore, perhaps, worth reporting :

D.S., a Hindoo, aged twenty-five years, came for treatment to the medical clinic of the Washington University Hospital on July 26th, 1904. His family history was good in every way. He had never before had any illness of consequence, did not use alcohol, tobacco or drugs, and gave no history of venereal disease.

His present illness began two weeks ago with a feeling of general langor and malaise. This the patient attributed to constipation, and took a purgative. His bowels moved freely, but there was no improvement in his subjective discomfort. He had been

sleeping poorly, suffered from nearly constant headache, and found himself growing constantly weaker. He believed that he had been having fever ever since the beginning of his illness. His appetite had remained fair, and he had had no particular abdominal discomfort. The bowels had been rather costive.

The patient was a small, sallow individual, showing considerable emaciation, face flushed, eyes dull, skin dry and hot, tongue coated, its margin indented by the teeth, the latter covered with sordes. His temperature was 101.4°, his pulse 80 when quiet, but becoming very rapid when the patient exerted himself a little. On physical examination nothing abnormal was found in the thorax. The abdomen was not distended nor tender, no rose spots ; the hard, smooth edge of the spleen could be felt on deep inspiration about 2 cm. below the costal margin. The urine was high colored, sp. gr. 1027, no albumen, diazo reaction negative. A Widal reaction done with the blood serum was negative. After two hours in the incubator at 37° C., there was firm clumping with loss of motion in a dilution of 1 to 20 ; most bacilli clumped but many still in motion in a dilution of 1 to 50, and only slight clumping at 1 to 100. There were at the time no cultures of paratyphoid at our disposal.

The patient was sent to St. Luke's Hospital and put to bed there. That same afternoon 8 c.c. of blood were sterilely aspirated from his cephalic vein and divided among three flasks containing 200 c.c. of bouillon each. In all these flasks a pure culture of a bacillus developed, the characters of which will be described below. As for the patient, his temperature rose that evening to 103.6°, pulse 98, respiration 28. He was given an enema, a cool tub bath, was put on liquid diet, but given no medication. During the night his temperature gradually declined to normal, and remained there. His spleen was palpable for several days, but slowly receded to its normal size. No new pathologic signs or symptoms developed. He was discharged, well, on August 4th.

The bacillus isolated from the blood was short with rounded ends, very slightly motile. It grew profusely on all ordinary media, the colonies on agar plates being round, bluish-white and elevated in the centre. It coagulated milk in twenty-four hours with the formation of acid, caused the formation of gas in glucose agar, reduced neutral red agar, but did not produce indol in Dunham's peptone solution. Unfortunately press of work at the time prevented further study of the bacillus, and when it was taken up again all the cultures had died out. The same is true of agglutination tests made with the bacillus. Owing to a technical error, the results of agglutination experiments made on the bacillus with the patient's and other blood were negative. Before another blood sample could be obtained the patient had left the hospital.

Nevertheless, the morphological and cultural characteristics of

the bacillus, as well as its source, all point towards its being a paratyphoid. Clinically the case was of the sort that all of us see with considerable frequency—cases that at first sight impress us as typhoids, but in whom the laboratory diagnosis contradicts the chemical one, and in which the rapid recovery, too, makes the diagnosis of typhoid fever untenable. It may be that more of these obscure febrile cases are paratyphoid than we might suspect.

Exencephalus, Report of a Case. Mary M. S. Johnstone, B.A., M.D., Chicago, Ill., in *The Woman's Medical Journal.*

November 16th, 1904, I was called to see Mrs. O., who was reported in labor. The patient is a strong, and well-developed woman. She has one child, a large, healthy boy of four years.

Date of last menstruation March 18th, 1004; quickening was first noticed July 1st, 1904.

Examination external and internal revealed a small fetus in the first position apparently occipito-anterior; heart beats 152 per minute and feeble. During the examination, movements of the fetus were distinctly felt; cervix uteri undilated.

The patient was having very fair pains when I reached the house. After four hours waiting the pains stopped, pain in the back, of which she complained bitterly, was relieved; cervix remained closed, and the patient fell asleep. I left the patient and was recalled the next evening, about twenty-four hours after my first visit, arriving just in time to deliver the fetus. There was no time for preparation, so a clean towel was used to protect the mother from infection by the hands. The fetus was rapidly expelled, breech first, legs extended parallel with the trunk, and with considerable force, exerted by the maternal expelling powers. The fetus survived birth about five minutes.

The fetus, female. A monstrosity very similar to one described in Zieglar's "General Pathology," on page 505, and called Hydroencepalocele Occipitalis, except that in the present instance there was no fluid in the protruding pouch. This form of deformity is also well described by Lewis in the *American Journal of Obstetrics and Diseases of Women and Children*, February, 1905.

After about four months' hardening in formalin, the fetus measured 26 cms. in length and weighed two pounds.

The body and limbs were well developed, the fingers seemed long in proportion, 2 cms. The head was flat, no forehead, nose large, broad and flat, eyes large and bulging, cheeks broad, 5 1-2 cms. There was practically no neck, the head resting on the shoulders; on the top of the head there was a ridge between the juncture of the frontal and parietal bones. The fetus was delivered at the seventh month of gestation.

The Placenta.—The placenta was 14 cms. by 7 cms., and the cord was only 21 cms. long. The placenta was located to the right and over the middle zone of the uterus, encroaching upon the lower or danger zone. Membranes were quite firmly attached at the fundus and had to be removed by manual curettage. The whole placenta was also removed manually.

The obstetrical and puerperal conditions are not without interest, and may be added to the report with profit :

Ten minutes after delivery a severe hemorrhage began, the blood poured out of the vagina, and the uterus was relaxed. In as much as massage and Crede failed to bring about uterine contractions and expel the placenta, I scrubbed my hands immediately, and removed the placenta by manual curettage.

The other measures used to aid in controlling the hemorrhage and in keeping up the strength of the patient were, to hold the abdominal aorta, raise the foot of the bed, and have an assistant massage the uterus. One-thirtieth of a grain of strychnine was given three times, and brandy was also used. Twice while working to free the placenta the patient seemed to be at the point of collapse, the pulse was weak, and her strength failed utterly ; it was at these times that the strychnine was given.

As soon as the placenta and membranes were removed, the hemorrhage ceased, the uterus contracted, and the patient regained courage and strength.

After the removal of the placenta, a vaginal douche of plain water, as hot as could be borne, was used, in order to help uterine contraction and prevent further bleeding, and to wash the vagina and vulva.

One dram of the fluid extract of ergot was also administered.

The foot of the bed was kept raised for several days, and ergot was given ½ dram t.i.d. for three days.

The pulse and temperature chart ran as follows :

	Pulse.	Temperature.
November 17th, 1 hour after labor.....	84	98.5 degrees.
November 18th	90	101.5 "
November 19th	100	102. "
November 20th	102	102.5 "
November 21st	98	100. "
November 22nd	90	99.5 "
November 23rd	76	98.5 "
November 24th	72	98. "

During the time that the temperature was high, the patient had a little headache, there was some pain in the abdomen, and the lochia had a bad odor, the color dark red.

Three grains of calomel and vaginal douches of bychloride of mercury 1-3000 followed by douches of plain water relieved all these symptoms.

The patient gave a history of a chronic purulent leuchorreal discharge of a greenish color that had existed for some time, and which became profuse during pregnancy. This may account for the character of the lochia, which, together with the reaction from the severe hemorrhage and the consequent anemia, may account for the headache, the pain and high fever on the third and fourth days after delivery. There was at no time pain or tenderness in the pelvic region. A pill of iron, arsenic and strychnine was given for the anemia.

Labor.—Pains existed for three days ; time of actual labor was short, perhaps two hours, and the third stage occupied one and a half hours owing to causes above referred to. The patient made an excellent recovery.

The question naturally arises, What are the causes of this faulty intra-uterine development?

Lewis, in his article previously referred to, says, "that it may be due first, to pressure from without, the pressure of a contracted amnion upon the cephalic region, so that adhesions form between the cephalic end of the amnion and the underlying tissues of the cephalic end of the embryo at an early period in embryonic life; or second, from pressure within the skull, the circulatory disturbances which result in fetal hydrocephalus."

Some writers go further, and find an underlying cause in maternal impressions, alcoholism or syphilis in one or both parents. In this case, there are no positive indications of syphilis, but the mal-development, premature birth, might point to a specific infection.

Pre-menstrual Pregnancy in a Girl Aged 13 Years. AUGUSTUS W. ADDINSELL, M.B., C.M. (EDIN.), M.R.C.P. (LOND.), Physician to the London Temperance Hospital, in *The Lancet.*

A girl, aged thirteen years, was taken to the London Temperance Hospital by her mother early in January last, suffering from abdominal pain and slight vaginal hemorrhagic discharge. The breasts were well developed and contained milk. There was an abdominal tumor. The pubic hair was very slight in quantity. As vaginal examination was extremely painful, an anesthetic was given. It was found that an arm and the cord were presenting. There was no pulsation in the cord. Mr. T. G. Ward, the senior resident medical officer, performed version and removed a well-developed seven months child, which showed no signs of life. Convalescence was without incident.

The interest of this case lies in the fact that impregnation took place before the outward signs of sexual maturity had manifested

themselves. The evidence of the mother had been carefully taken ; the girl herself was very positive that "she had never seen anything," and remained unshaken when questioned by the medical Registrar or by the sister of the ward in private conversation ; she was at school, and professed entire ignorance of her condition ; moreover, she positively denied any intimacy with man or boy.

There is nothing very remarkable in the age of this young mother. Plenty of cases of precocious maternity are to be met with. A girl, nine years old, gave birth to an infant in France ; others of eleven and three-quarters, twelve, and twelve and a half years, respectively, are recorded in this country, but in these cases previous menstruation has been noticed. The testimony of the patient and her mother in this instance is so definite as to make it quite certain that the usual monthly flow had never taken place. After all, is this very wonderful ? The signs of sexual maturity in the female are well known to be development of the mammary glands, growth of pubic hair, and finally menstruation. Whilst these are the outward signs of sexual maturity, cellular activity within the ovary has been proceeding regularly since the birth of the individual. A very interesting and instructive contribution towards the study of the fate of the ovum and Graafian follicle in pre-menstrual life has been published by Dr. T. G. Stevens in vol. xlv. of the "Transactions of the Obstetrical Society" for 1903. He there traces the history of the follicles and the series of changes they undergo, together with the fate of the ovum and its ultimate removal by the phagocytic agency of the cells of the membrana granulosa. This cellular activity within the ovary of the female is precisely similar to that which goes on within the testis of the male leading to the development of the spermatozoa.

Now sexual maturity depends for its onset upon a variety of causes, climate, race, nutrition, growth, etc., but there is reason to believe that our remote ancestors matured sexually much earlier and were much more prolific ; and that with the advance of so-called civilization the recognized nubile age has been made later and later, until at the present time it represents a grave sociological problem in more than one European country. In Central Africa it is by no means an uncommon thing for a girl to become a mother before she has menstruated, and in certain districts of India, where early marriages are common, the same thing has been recorded. Rachmakoff, a Russian physician, reports a case in a girl, aged fourteen years. A traveller in the remote regions of Australia told me of a case in his own camp of a girl, aged ten year , who had never menstruated, and became pregnant. Metchnikoff, in his book, "The Nature of Man," quotes several cases also. In the warmer and Eastern climates then it would appear to be a well recognized fact, and this doubtless because there is in those countries less sexual restraint ; while in the West sexual maturity in

both sexes comes later, and when it does come, environment, habit, training, and general oversight make early or precocious impregnation less probable, but that is all; precocity in the East is the rule, in the West it is the exception.

The life-history of the ovum and the follicle in pre-menstrual life, as traced by Dr. Stevens, shows that maturity up to a point is constantly going on in those follicles which come to the surface, and when that point is reached retrograde changes take place in the infantile ovary. Now, as the age of sexual maturity is being reached and as ovulation is regularly proceeding, it is easy to see how impregnation might occur even though the outward and visible signs of sexual maturity be absent. The periodic occurrence of ovidation is most assuredly independent of menstruation and certainly precedes its initial onset, and it is not difficult to see how the nervous and circulatory excitement attendant upon the act of coition may bring about the rupture of a ripe follicle and the resulting escape of the ovum.

Assuming the statement of this patient and her mother to be true (and there is no reason to doubt it, for every effort has been made to ascertain the exact facts)—viz., that she had never menstruated—then it is an added proof, were that needed, of the contention that ovulation and menstruation are not interdependent, though they may be coincidental.

There is something curiously akin to a pathological process in the menstruation of women. In every other instance discharges of blood, whether from the intestines, lungs, or kidneys, are evidence of disease. The analogue in the higher vertebrates is "heat," but in very few is this accompanied by a discharge of blood, and where there is a slight staining, the proportion of red blood corpuscles to white is very small, as in those macaque monkeys observed by Heape of Cambridge. In the case of "Johannah," the famous chimpanzee, whose menstrual history I have recorded elsewhere, I made a careful microscopical examination of the menstrual discharge and satisfied myself that the red corpuscles were comparatively small in number, though enough to tinge distinctly and to stain red the monthly flow; still, all these were under the artificial surroundings of captivity. Not only the attendant pain and copious loss in women, but the general and nervous disturbance occurring at these times are suggestive of a departure from the originally normal line. The amenorrhea accompanying lactation is often regarded by women as a welcome condition of security from impregnation. This we know to be an error, for ovulation is proceeding with the accustomed regularity and impregnation may, and often does, take place. Furthermore, the development of the endometrium every month may be safely regarded as the preparation of the uterus for the implantation of an impregnated ovum, and the

menstruation may be considered as evidence of a failure of these anticipations.

It is quite likely that primitive woman never menstruated, at any rate as we know menstruation to-day, and there is reason to believe that this phenomenon, this heritage of woman, of which she is not proud and for which she is not grateful, has assumed its present proportions as a result of the almost universal practice, begun in the earliest ages, of restraining the excessive uberty of our primeval ancestors.

A Case of Chronic Intestinal Obstruction with Perforation of the Sigmoid Flexure. GEORGE A. CLARKSON, F.R.C.S. (ENG.) in *The Lancet.*

The notes of the following case present one or two points of considerable interest. At the time of the first operation the history and the age of the patient led me to believe that I was dealing with a stricture of some part of the colon due to growth, but the distension of the small intestines and cecum was so great and the call for immediate drainage of the distended bowel was so urgent that no prolonged examination of the colon could be made. The subsequent sloughing and perforation of the sigmoid flexure probably occurred at the seat of obstruction, yet here no cause was obvious to account for the condition found. The gut, though in a condition litt'e short of gangrene, was apparently not invaded by growth, and the fact that no fecal matter was found in it rather excluded the idea that retention of a scybalous mass of feces at that point had given rise to inflammatory softening and perforation of its coats.

The patient, a woman, aged fifty-two years, had suffered from disease of the outer surface of the acetabulum for twelve years, and the sinuses on the outer side of the right hip had healed after, a free exploration and scraping in May, 1903. In the spring of 1904 she began to be subject to occasional attacks of vomiting, accompanied by abdominal pain, distension, and constipation, but these attacks were relieved from time to time by aperients and enemata. On May 9th she was seized with a severer attack than usual. The bowels were at first relieved and the sickness would stop for twelve hours at a time, but invariable returned again. The patient was kept in bed, put on a fluid diet, and saline aperients and enemata were given with some result. A rectal examination revealed no stricture within reach of the finger, nor could anything be felt through the abdominal walls to localize the seat of obstruction. On the 15th the symptoms became urgent, the vomiting being persistent and copious, but not offensive in smell, the abdominal distension became very great, and there was obviously

more or less complete obstruction. Enemata given through a long rectal tube produced no effect, so the patient was removed without delay to a surgical home. The operation was carried out in the evening. The abdomen was opened in the middle line below the umbilicus. Enormous distension of the small intestines and cecum was met with, and as the transverse and descending colon appeared less distended and the indication to drain the bowel with as little delay as possible was urgent, the wound was closed and another small incision was made over the cecum, which was drawn out, opened, and a Paul's tube tied in. Following the operation there was a little vomiting of a stercoraceous character, but the cecal opening gave great relief and the acute symptoms subsided At the end of a fortnight the patient was able to be removed home. Enemata were subsequently given from time to time and occasionally brought away small scybalous masses.

On the afternoon of June 11th the patient was suddenly taken ill with intense pain in the left inguinal region, and when I saw her was extremely collapsed, with drawn features, cold extremities and thready pulse. Subcutaneous injections of strychnine, with a little morphine, were given, and she gradually rallied, symptoms of an acute localized peritonitis quickly manifesting themselves. A diagnosis of intestinal perforation was made, and on the 15th an incision similar to that for inguinal colotomy was made over the area of pain and resistance. On opening the abdomen some very foul-smelling pus welled up, and the abscess cavity having been thoroughly swabbed out, the sigmoid flexure was seen plastered over with thick lymph and with a perforation on its anterior surface of the size of a shilling. The coats of the bowel were softened, black, and gangrenous, and in bringing it forward it tore almost across. The wound was therefore enlarged in an upward direction and the bowel was slit up with scissors till its walls appeared unaffected by the changes below and would allow of its being stitched to the skin, which was then done. The whole condition seemed to be an acutely inflammatory one. The abscess cavity was again swabbed out and then packed with iodoform gauze, an indiarubber tube of large calibre being passed into the colon.

The patient stood the operation well. The discharge was most offensive for some days, but the cavity contracted quickly and at the end of a month the opening differed but little from an ordinary colotomy opening, and it acted well. As the cecal opening became an annoyance to the patient when she began to get about again, owing to the liquidity of the discharge, on August 11th, under ether, the mucous membrane was separated from the skin and the opening closed. At the time of writing (March, 1905) the patient finds no difficulty in controlling the artificial anus, and she is able to get about out of doors and to resume her ordinary domestic duties at home.

A Case of Chorea, Fatal, Apparently, from Excessive Muscular Action. J. P. Crozer Griffith, M.D., of Philadelphia, in *American Medicine.*

Although chorea is of such common occurrence, instances of death directly dependent upon the disease or its complications, though not actually rare, are still far from frequent. The Collective Investigation Committee of the British Medical Association found nine deaths in 439 cases of chorea, *i.e.*, 2 per cent. Sinkler found but sixty-four cases of death from chorea reported in Philadelphia during seventy-four years, and textbooks in general refer to the disease as having a most favorable prognosis, so far as recovery from the actual attack is concerned. We cannot know how many of the recorded deaths depended upon some complication, such as a rapidly fatal endocarditis. Undoubtedly the majority are due to such causes, and it is extremely likely that Baginsky is entirely correct in saying that death as a result of the fearful muscular action which continues night and day is seen but seldom.

In view of these facts the report of the following case is not without interest :

R. B., male, aged eleven years, was admitted to the Children's Hospital of Philadelphia, under my care, January 3rd, 1905. The family history was entirely negative as far as could be ascertained. The patient had had good health except for the occurrence of measles when five years old, and for an attack of what was called "nervousness" at the age of nine years, which lasted seven or eight weeks, and was said to be similar in nature to, although less severe than, the present one. He was treated in a hospital and recovered completely. Since that time he had been well until a month before admission, when the parents noticed that he was becoming restless, could not sit long in a chair, and twisted his hands and fingers about. At night-time he was quiet. Soon grimaces and rolling of the eyes developed, and later general choreic movements of the arms, legs and body. In the last week these movements had become excessive, the slightest excitement causing general and very violent tossing about of the extremities and of the trunk.

On admission the child appeared pale and ill. Nothing abnormal was found in the throat or the lungs, but a systolic murmur was audible over the heart in the mitral region. The abdomen was retracted, and some of the inguinal glands were enlarged. There appeared to be no control over the tongue, but the mouth could be opened fairly well. Speech was so much affected that it was almost incomprehensible. The child appeared, however, to understand, although he could not well do what he was told, nor did he seem able to make his desires known satisfactorily. There

was frequent loud crying and moaning. The choreic movements were widespread, constant and very violent. Respiration was jerky and irregular, the diaphragm acting irregularly and sometimes one side of this or of the thorax appearing to move while the other side did not. Rigidity of the arms alternated with violent tossing of them about from the shoulder-joint. The grip in both hands was weak. The movements of the right leg were somewhat greater than those of the left, and the patient was able to flex the left leg only after great exertion and excitement. The patellar reflexes were slightly increased. There was no ankle-clonus. The movements were so constant and severe that the skin showed widespread excoriations and bruises.

The child was given a purgative, and administration of Fowler's solution was started, while for immediate relief he received chloral hydrate and potassium bromid in full doses. Later a hypodermic injection of morphin was given, but as this had little effect it was repeated twice during the night. In spite of this treatment he slept very little—not more than half an hour on the night of January 3rd. On the night of January 4th, he slept about three hours, but on the morning of January 5th he became extremely restless again and was now violently delirious and threw himself about to such an extent that he broke the straight-jacket by which he was restrained. His mental state was clearly distinctly worse and it is questionable whether he would have been able to understand and answer questions, even had the muscular inability not prevented it. The administration of chloral and of potassium bromid was continued, but with little effect. Morphin, too, having proved of no avail, a hypodermic injection of .1 mg. ($\frac{1}{500}$ gr.) of hyoscin hydrobromate was administered in the afternoon and again during the night, and broken sleep amounting to eight hours in all was secured. January 6th found him quieter, but very stupid. When disturbed he showed at once the extreme choreic movements, attended by violent delirium. On this date the chloral and bromid were stopped, and the boy was kept quiet by hyoscin.

Examination on January 6th showed the child had emaciated very decidedly. The color was pale with some degree of cyanosis. The cardiac dulness extended upward to the third rib and reached the right border of the sternum, but did not seem to be specially increased. The apex beat was in the nipple line in the fifth interspace and was of fair strength, but rather diffuse. The mitral systolic murmur could be heard all over the precordium, was transmitted well to the axilla and to the angle of the scapula behind, and was certainly louder than when the child was admitted to the hospital. Control over the bladder and rectum had been lost on the preceding day and there was now some difficulty in swallowing; solid food not being taken at all, and liquid only very slowly.

A blood count made on this date showed red blood cells 5,730,000, leukocytes 22,400, hemoglobin 85 per cent. The urine had shown neither albumin, sugar nor casts on examination, although some acetone was present.

The patient was quieter during the greater part of January 8th, this being partly the result of hyoscin and partly apparently due to failing strength and increasing mental torpor. He was fed at times with a nasal tube and occasionally was able to swallow well. He apparently tried to talk, but was unable to do so. In the afternoon of January 9th his color became very bad, his pulse almost imperceptible, coma deepened, weakness increased, and he died shortly after 8 p.m.

The temperature was slightly over 101° on admission and had ranged from 101° to 103° until the afternoon of death, when it reached 104.8°. A blood culture was taken by C. Y. White on the morning of the day of death, but no conclusions could be drawn, as the result showed there had been decided contamination.

An autopsy was performed by Dr. Wadsworth, the coroner's physician, on January 10th, but circumstances prevented this from being entirely satisfactory, no microscopic study of the brain or spinal cord being possible, and the cultures which were attempted from different parts of the body being necessarily made under such circumstances that contamination was unavoidable. The report given me by H. C. Carpenter is as follows:

Microscopic Appearances.

Skin is a purplish yellow, as in septic conditions. Bronzing over body, especially over abdomen and hips. Abrasions over all the bony prominences. Finger-nails blue, and sordes on lips and nose. Black mark over right eye. The pericardium is slightly thickened. Heart muscle is pale, and the mitral valve has a fringe of granular vegetations from 1 mm. to 2 mm. in diameter, all along the edge. Small spots of yellow atheroma are seen running transversely across the beginning of the aorta. Over left lung, posteriorly, are seen the remains of an old pleurisy. The lungs show some hypostatic congestion and edema posteriorly. Liver: Section slightly yellowish. Spleen somewhat softer than normal, slight increase of fibrous tissue of capsule. Kidney: Lobulated, capsule slightly adherent; stellate congestion of cortex, parenchyma swollen. Adrenals are very large; right, 12 cm., 2.5 cm., 1.5 cm. Left, 10 cm., 3 cm., 1.5 cm., otherwise normal. Stomach is very large and distended. Intestines are markedly congested in places. Pancreas is slightly congested, and very firm. Lymph-glands of mesentery and retroperitoneum are enlarged, but not congested or caseous. Brains: Increase of fibrous tissue about vessels of arachnoid, cerebrum congested, cortex normal, no flattening of convolutions.

Histologic Examination.

Heart Muscle.—The connective tissue is increased, and there is considerable round-cell infiltration around the vessels, and, in isolated areas, round-cell infiltration between the muscle bundles. In places heaps of cells. Muscle fibers in close proximity to vessels show interfibrillary infiltrations. Some few muscle fibers hypertrophied. Section from mitral valve shows cellular infiltration with moderate amount of congestion.

Lungs.—Moderate congestion. Alveoli filled with fluid. Slight anthracosis. Some parts of the lung show round-cell infiltration into the alveoli.

Lymphatic Glands.—Moderately congested.

Diaphragm.—Muscle bundles in good condition with the exception of a few individual muscle fibers, which stain paler than normal. Some increase of connective tissue between the muscle bundles.

Liver.—Slight fatty infiltration. Slight amount of congestion throughout.

Kidney.—Moderate amount of congestion. The cells of the tubules normal, except, in a few isolated tubules, where there is cloudy swelling.

Pancreas.—Normal.

Suprarenal Gland.—Peripheral zone congested slightly, otherwise the gland is entirely normal.

Intestines.—Moderate congestion. Slight increase of intertubular tissue.

Appendix.—Same condition as bowel.

Spleen.—Congestion, vessels thickened. Malpighian bodies few and small.

Bacteriologic Examination of Tissues.

Heart muscle contains a small coccus. In the cellular infiltration there is a mixed infection, bacilli, cocci, diplococci, and streptococci.

Lymphatic glands contain a small coccus in groups, and also a diplococcus.

Only one who has seen a case of the kind described can conceive of its terrible nature. I may, in passing, mention that I have never before witnessed any one at all parallel to it, and hope never to do so again. While it is impossible to state absolutely in this instance that the death did not depend upon the complicating endocarditis or the general toxic state of the system the result of the infection, yet the fatal issue had all the appearance of being the direct result of the movement. Certainly a long continuance of life was incompatible with the excessive muscular action.

Society Reports--Notes of Interest.

THE ONTARIO MEDICAL ASSOCIATION.

The 25th annual meeting of this Association will begin Tuesday, June 6th, and be continued until the 8th, in the Medical Faculty Buildings, Queen's Park, under the Presidency of Dr. Wm. Burt, of Paris. The organization of this Society was effected largely through the efforts of the late Dr. J. E. Graham, and has through its quarter century of existence become a unified force and power in the medical life of the province. Under the direction of a long line of wise presidents, including such familiar names as Clark, Richardson, Rosebrugh, Temple, Moorhouse, Reeve, Bruce Smith, Grasett, Britton; and later, Gibson, McKinnon, Powell, Mitchell and Ross. The development has been along broad and generous lines, and while the numerical success has not been as great as could be desired, the elevation of the moral force of the Association has been increased so that it stands to-day for ethical righteousness, for scientific progress, and for everything which tends to enhance the professional status of its members and the welfare of the communities in which they have so important a place.

These principles guarantee the continuance of the Society's existence. It is then the duty of the men throughout the province to give force to the principles which their wisely selected leaders have expressed. That is especially the case with the younger men and the only way to accomplish this end is to attend the meetings of the Association, and become imbued with its spirit. Given the enthusiasm of members with the present solidarity of purpose, there will be no limit to the effectiveness of its work.

The quality of the papers presented, the professional standing of those who are attracted from at home and from outside Ontario to participate in its deliberations, ensure every member being well repaid for the time consumed in attending the meeting. It is a fine post-graduate course compressed into a few hours, only demanding a little individual concentration of effort to make it of great value to every one. Only practical subjects are presented and only practical every day workers and thinkers discuss them.

With William Burt as president, and A. Primrose and I. H. Cameron as chairmen of the local committees, with a full supply of interesting papers, with visitors of the prominence of Drs. Ochsner, of Chicago, and Pritchard, of New York, there is no doubt of the success of the meeting. The provisional programmes will be issued before the end of the month.

The Gardener's Spade Deformity, and the Silver Fork Deformity, in Fractures of the Carpal End of the Radius.

At a recent meeting of the College of Physicians of Philadelphia, Dr. John B. Roberts of that city said that these lesions continued to be badly treated by many practitioners. For comfortable convalescence and perfect cure it is essential that the normal cavity of palmar surface be perfectly restored, and this must be accomplished even if great force be required to disentangle the fragments. The "gardener's spade deformity," so designated by Dr. Roberts, is fracture in the same part of the radius, but with displacement in the opposite direction. This was frequently unrecognized and consequently imperfectly reduced. When the carpal end is disentangled in both the "silver fork" and "gardener's spade" deformities, the treatment is simple once normal apposition is secured. A light straight splint on the dorsum of the forearm and hand, or a convex splint on the palmar surface, was the proper retentive dressing.

Local Anesthesia in Radical Cure of Inguinal Hernia.

Dr. John A. Bodine, at the March 20th meeting of the New York County Medical Association, presented a plea for the use of local anesthesia in the radical operations for the cure of inguinal hernia. He has made a personal study of 300 radical operations by local anesthesia in 284 patients, 16 being cases of double rupture. There were 275 males and 9 females, the youngest patient being 15 years and the oldest 80 years. The amount of cocain used in no case exceeded ½ grain. In not one case was there any wound suppuration and no patient died.

Vincent's Angina.

Dr. Wm. N. Berkeley, read a paper before the New York Academy of Medicine recently, on the present clinical and bacteriological status of Vincent's Angina, which disease he defined to be a localized, acute or subacute inflammation, usually ulcerative, less often membranous, of the mouth and fauces. Vincent's accounts of the affection attracted the attention of the medical world in 1898; and, during the last four years, the disease had been repeatedly noted in all of the large clinics in New York. The lesion is usually a circumscribed penetrating ulcer, its sight in the majority of cases being on the tonsil, usually on one, and rarely on both. Out of 22 cases seen by Dr. Berkeley, 14 involved the right tonsil The superficial similarity of Vincent's angina and tonsillar diphtheria were very great. Sprays of permanganate of potash and Lugol's solution seem to be of value in the treatment.

Physician's Library.

"*The Eye, Mind, Energy and Matter.*" By CHALMERS PRENTICE, M.D., Chicago, Ill.

From the perusal of this rather peculiar little work one would be inclined to say the author is an ophthalmic specialist, and one who is disposed to refer a large percentage of human ills to eye defects, or impressions received through the sense of sight. We cannot always agree with the author's views, as when, for instance, he says: "Disease is simply perverted function." To our mind disease is much more than simply perverted function. A liver may be suffering from "perverted function," the result of an attack of acute alcoholism, or the same organ may be suffering from malignant disease, in which case it would seem to us there is something more than simple perversion of function. On the other hand, the author's ideas on such subjects as alcoholism and its relief or cure by "fogging" the vision, are, we think, bound to give rise to much thought, and, who shall say? perhaps revolutionize our method of treatment. The work is published by the author.

Practical Pediatrics. A Manual of the Medical and Surgical Diseases of Infancy and Childhood. By Dr. E. GRAETZER, Editor of the *Centralblatt Fur Kinderheilkunde* and the *Excerpta Medica.* Authorized translation, with numerous Additions and Notes, by HERMEN B. SHEFFIELD, M.D., Instructor in Diseases of Children, and Attending Pediatrist (O.P.D.) New York Post-Graduate Medical School and Hospital; Visiting Pediatrist to the Metropolitan Hospital and Dispensary, etc. Pages xii-554. Crown Octavo. Flexible Cloth, Round Corners. Price, $3.00 net. Philadelphia: F. A. Davis Company, publishers, 1914-16 Cherry Street.

One of the best works on this subject it has been our luck to run across for many a day. It is possible there is no book published on pediatrics which presents in so small a space such an abundance of practical and clinical material, pathological and bacteriological data, and details of etiology and diagnosis. A truly excellent work, and one particularly useful to the young practitioner, to whom our advice is—*get it.*

Lea's Series of Medical Epitomes. Edited by VICTOR C. PEDERSEN, M.D.

Alling and Griffin's Diseases of the Eye and Ear. A manual for Students and Physicians. By ARTHUR N. ALLING, M.D., Clinical Professor of Ophthalmology in Yale University, Department of Medicine, New Haven, Connecticut, and OVIDUS ARTHUR GRIFFIN, B.S., M.D., Late Demonstrator of Ophthalmology and Otology, University of Michigan, and Oculist and Aurist, University Hospital, Ann Arbor, Michigan. In one 12mo volume of 263 pages, with 83 illustrations. Cloth, $1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1905.

The *Medical Epitome Series* is rapidly approaching completion, this being the seventeenth of the twenty-two handy volumes which are to cover the essentials of every branch of Medicine and Surgery. It is easy for students, and practitioners as well, to post themselves to date for examinations or practical purposes by reading these authoritative little books. They are written by professors or teachers in colleges of high standing. Yale and the University of Michigan, for example, furnish the authors of this excellent volume on the Eye and Ear. These subjects are treated in a manner as clear, thorough and interesting as the necessary limits of space will permit. The illustrations are numerous and effective.

"*Malformations of the Genital Organs of Woman.*" By CHAS. DEBIERRE. Translated by J. Henry C. Simes, M.D. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. Net price, $1.50.

A valuable contribution to the literature of teratology, and while, perhaps, not of special interest to the busy general practitioner, a glance at the contents is sufficient to engage the interest of the anatomist and pathologist.

Saunders' Question Compends.—Essentials of the Practice of Medicine. Prepared especially for students of medicine. By WILLIAM R. WILLIAMS, M.D., formerly Instructor in Medicine and Lecturer in Hygiene, Cornell University; Tutor in Therapeutics, Columbia University (College of Physicians and Surgeons), New York. 12mo of 461 pages. Philadelphia and London: W. B. Saunders & Co., 1905. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Double number. Cloth, $1.75 net.

In this new volume in Saunders' Question-Compend Series the student is provided with a book of the utmost practical value. Throughout the work special stress has been laid on the more common aspects of the various diseases, emphasizing the contrasting points in similar condition, so as to render differential diagnosis as easy as possible. Symptomatology and treatment have likewise been adequately, although concisely, considered. In fact, this little work is the best we have seen, and for students preparing for examination it will be a most welcome and trusty aid. It contains a vast amount of practical, essential information in the least possible space.

American Edition of Nothnagel's Practice.—Diseases of the Blood (Anemia, Chlorosis, Leukemia, Pseudoleukemia). By DR. P. EHRLICH, of Frankfort-on-the-Main; DR. A. LAZARUS, of Charlottenburg; DR. K. VON NOORDEN, of Frankfort-on-the Main; and DR. FELIX PINKUS, of Berlin. Entire volume edited, with additions, by ALFRED STENGEL, M.D., Professor of Clinical Medicine, University of Pennsylvania. Octavo volume of 714 pages, fully illustrated. Philadelphia and London: W. A. Saunders & Co., 1905. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Cloth, $5.00 net; half morocco, $6.00 net.

This volume on Diseases of the Blood is the ninth in Nothnagel's Practice to be published in English. It includes Anemia, Chlorosis, Leukemia, Chloroma, Pseudoleukemia, and each condition is treated so exhaustively and the theories discussed so carefully that the work will remain the last word on the several subjects for many years. Dr. Alfred Stengel, under whose excellent supervision the entire series is being issued, is also the indi-

vidual editor of this volume. His wide experience and recognized ability as a clinician, and his valuable work concerning the histology, both normal and pathologic, of the blood, renders this volume of unusual interest. His additions are particularly frequent in the article on anemia. When this series is completed—and the publishers assure us that the three remaining volumes will shortly appear—it will undoubtedly form the best practice of medicine in existence, expressing the opinions of the highest German and English speaking authorities.

Eye, Ear, Nose, and Throat Nursing. By A. EDWARD DAVIS, A.M., M.D., Professor of Diseases of the Eye in the New York Post-Graduate Medical School and Hospital, and BEAMAN DOUGLASS, M.D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. With 32 illustrations. Pages xvi-318. Size, 5½ x 7⅞ inches. Extra Cloth. Price, $1.25 net. Philadelphia: F. A. Davis Company, Publishers, 1914-16 Cherry Street.

A most useful little work, written primarily for the use of nurses, but, we are sure, will be read by medical men, especially general practitioners, with no little interest.

A Text-Book of Medical Chemistry and Toxicology. By JAMES W. HOLLAND, M.D., Professor of Medical Chemistry and Toxicology, and Dean, Jefferson Military College, Philadelphia. Octavo volume of 600 pages, fully illustrated, including eight plates in colors. Philadelphia and London: W B. Saunders & Co., 1905. J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Cloth, $5.00 net.

Dr. Holland possesses the faculty of making even the most difficult and complicated chemical theories and formulæ easy and clear. This is probably due to his thirty-five years of practical experience in teaching chemistry and medicine. Recognizing that

to understand physiologic chemistry students must first be informed upon points not referred to in most medical text-books, the author has included in his work the latest views of equilibrium of equations, mass-action, cyroscopy, osmotic pressure, dissociation of salts into ions, the effects of ionization upon electric conductivity, and the relationship between purin bodies, uric acid and urea. Chemical substances he has treated from the standpoint of the medical student and physician, giving much more space to toxicology than is given in any other text-book on chemistry. The chapters on the clinical chemistry of milk, gastric contents, and the urine, and that on water supply and filtration are full of practical information. Dr. Holland's work will undoubtedly be gladly received by the profession, presenting as it does the mature experience of a practical teacher.

Gynecology.—Medical and Surgical Outlines for Students and Practitioners. By HENRY J. GARRIGUES, A.M., M.D, Gynecologist to St. Mark's Hospital in New York City; Consulting Obstetric Surgeon to the New York Maternity Hospital; Consulting Physician to the New York's Mothers' Home and Maternity; Honorary Fellow of the American Gynecological Society; Honorary Fellow of the Obstetric Society of Edinburgh; Honorary Member of the College of Physicians of the German Dispensary; ex-President of the German Medical Society; formerly Professor of Gynecology and Obstetrics in the School for Clinical Medicine, and Professor of Obstetrics in the Post-Graduate School and Hospital. With three hundred and forty-three illustrations. J. B. Lippincott Company, 1905. Price, $3.00.

Most of the text has already appeared in the author's well-known work, "Diseases of Women." An endeavor has been made to shorten the text without interfering with its usefulness. The chapters dealing with anatomy and physiology are missing in the new work, and a chapter on diseases of the rectum has been added. The same order has been maintained, but the book has been entirely rewritten. Dr. Garrigues writes with a force and clearness that cannot fail to be interesting. As a text-book for medical students, and as a compact work on modern gynecology for practitioners, it can be highly recommended.

The American Year-Book of Medicine and Surgery for 1905. A Yearly Digest of Scientific Progress and Authoritative Opinion in all branches of Medicine and Surgery, drawn from journals, monographs and text-books of the leading American and foreign authors and investigators. Arranged with critical editorial comments, by eminent American specialists, under the editorial charge of GEORGE M. GOULD, A.M., M.D. In two volumes. Volume I., including General Medicine; Volume II., General Surgery. Two octavos of about 700 pages each, fully illustrated. Philadelphia and London: W. B. Saunders & Co., 1905. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Per volume, cloth, $3.00 net; half morocco, $3.75 net.

The 1905 issue of Saunders' American Year-Book of Medicine and Surgery fully maintains the pre-eminent position which it long ago established. Dr. Gould, the editor, has associated with him a staff of men of the greatest ability, shown in the conscientious thoroughness with which each article is prepared. Here the practitioner has placed before him, and at a very moderate price, the cream of all the medical literature published during the past year, and in such a form that it is readily digestible. As a compendium of medical and surgical progress, it will prove invaluable; for the practitioner anxious to keep abreast of the advances in the subjects treated, it will be of the utmost assistance. The text, as usual, contains a number of illustrations of practical value; there are also nine insert plates of much excellence.

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ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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COMMENT FROM MONTH TO MONTH.

We will not have the opportunity to remind our readers again of the Annual Meeting of the Ontario Medical Association in this city from the 6th to the 8th of June, and we urge upon them to come if they possibly can. The meeting promises to be a good one, we are informed by the secretary, Dr. C. P. Lusk, Bloor Street West, Toronto, and you may miss a real good thing. Get into touch with your neighbor; see whether he intends to go or can go; tell him to go and you will look after his practice while he is gone; or ask him if he will look after yours while you are gone. An attendance of 200, in a medical population of 2,500, at our provincial organization is not enough. The cities ought to do better than they have been doing in the past. Every practitioner in Toronto ought to look in some time or other during the meeting. No practitioner in this city is so busy that during the three days of the meeting he cannot attend at least one session. Indifference is the besetting sin in most cases. Purge yourself of it!

While you are thinking about the Ontario Medical Association, begin to think as well that you have a personal interest in Canada's national, medical organization, the Canadian Medical Association and that the Canadian Medical Association has a great interest in you. There is going to be a great meeting, and a good meeting, at Halifax this year from the 22nd to the 25th of August. If you do not attend these meetings you are missing the annual event of importance in the medical life of your country. The register proves that there are a great many medical men of Canada who attend these meetings regularly year in and year out, and scarcely ever miss a meeting. The annual meeting of that lusty and thriving child of the Canadian Medical Association, the Canadian Medical Protective Association, takes place during the progress of the meetings of the former. You either have, or you ought to have, a keen interest in that event. If you are not a member refer to our announcement opposite the editoral page, and you will get full information. We urge you to become a member without delay.

Dr. Charles O'Reilly has handed in his resignation of the office of Medical Superintendent of the Toronto General Hospital. The severance of his connection with an institution over which he has presided so splendidly for over twenty-nine years, is an event of importance. He was by far the most capable hospital administrator in Canada, and has been instrumental in developing the General, which is the largest hospital in the Dominion. Dr. O'Reilly knew well how to run a hospital. Affable, genial, popular with the members of the staff, diplomatic—he combined such good gifts—that the Board of Directors will experience difficulty in filling his position so satisfactorily as he has done it. It will take years to accustom oneself to the General without the presence of "Charley" superintending. All will wish him a happy holiday abroad.

It was the custom of former Governments of the Province of Ontario to appoint asylum superintendents and assistant physicians from the political hustings; so we sincerely hope that it is not going to be the practice of the present administration, because it is a very unjust and indefensible practice. What does a doctor,

who is a politician, know about the treatment of the insane, those most unfortunate of individuals, who should have the best care and attention that medical knowledge can give them? Yet it has been the invariable, but wrongful policy, to pick out from the political caucus a physician who has been busy on the side lines during election times. It is to be hoped that the practice will cease under new auspices, and that inducements will be extended to medical men to specially qualify themselves for such important practice; and that when vacancies occur they will be filled with due regard to the medical qualifications and not to the political qualifications of the candidate. There should be adopted a system of promotion, as a man who has spent several years in asylum practice, must plainly be better, yes, far better, qualified to do that work than he who comes from the party caucus.

Five hundred deaths in Ontario during the first quarter of the present year from tuberculosis, a preventable disease, is indeed, alarming, and would lead one to think that the medical profession has not seized hold of the essentials of treatment in this disease. It would as well lead one to think that in many of these cases there is regrettable delay in making a diagnosis, probably in many cases, because the patient does not present himself or herself for treatment until irreparable damage has been done. Those who would prevent disease must get down to first principles. It will take a generation to arrive at any distinct advance; for the proper place to educate is the public school. If that plan were adopted and followed out, to teach elementary sanitary science, just as arithmetic, reading and grammar are taught, results would accrue.

Cerebrospinal fever, cerebro-spinal meningitis, a disease which has caused over 1,000 lives in New York City since the beginning of 1905, is claiming the attention of the medical world. Dr. J. C. Wilson, of Philadelphia, gives in the 29th of March issue of The *Journal of the American Medical Association*, in a very interesting and valuable paper, these symptoms in the ordinary forms. No-

other acute disease appears in such various disguises ; and Stille has well called it a "chameleon-like disorder." There are headache, dragging muscular pains, vertigo and a sense of fatigue, chill, nausea and vomiting. The patient often acts like a drunken man. Then there are dragging pains in the neck, spread along the spine, into the extremities, soon followed by motor symptoms, such as great pain on attempting to move the head, stiffness of the spinal muscles. A common symptom is strabismus, inequality of the pupils and palsies of the facial muscles. Then opisthotonous develops, the head being drawn back and the spine curved, with the forearms flexed on the arms and the legs on the thighs. Coming and going there are muscular cramps, and in young children convulsions. The pulse is also irregular. Fever may be slight or absent, while again it reaches 105° to 106°. Lesions of the skin are quite common, hence the name spotted fever—and they are polymorphous. Dr. Wilson says this of Kernig's sign: "The phenomenon described by Kernig in 1884, and known as Kernig's sign, is found to be present in eighty to ninety per cent. of the cases of meningitis, and only exceptionally present in other cases. This test is often attended by evident pain on the part of the patient. Kernig's sign is not available in cases of rheumatic or other forms of arthritis of the knee or hip, myositis, contractions from nervous disease and sciatica."

An idea has originated in Philadelphia, a sanitary reform, which may promise much, namely, the delivery of milk in paper bottles. Everyone is interested in a pure milk delivery ; and the idea of delivering milk in receptacles which may at once be destroyed as soon as their contents are used, will go much towards promoting this end. Dr. A. H. Stewart, city bacteriologist of Philadelphia, has conducted a series of tests, and reports favorably upon paper bottles, which are to be manufactured out of heavy paper or pasteboard made from spruce pulp. A manufactory has already been established in Pittsburg, which in a few months will have ten machines manufacturing 20,000 of these bottles per day. They are stamped out of three-ply paper, given a conical shape to facilitate packing, have bottoms of a double thickness, and two

pounds of milk may be placed in each without crushing. The over-lapping edges are glued and the interior is coated with fine paraffine. They are sterilized by exposure to a temperature of 212°. The bottles will be manufactured at less than a cent apiece.

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The Hon. Mr. Hanna, the Provincial Secretary of Ontario has, so he states, not lost sight of the fact that it would be in the interests of the Toronto Provincial Hospital for Mental Diseases, if that institution were established outside the city in a rural district. In this the medical profession will concur; and as the City of Toronto is extending its business centre day by day to the westward, the site of the present buildings would make valuable lots for homes for the working classes. The honorable minister might well consider the advisability of changing the name of asylum, as attached to these institutions, and of appointing outside staffs, same as are attached to hospitals. There is no doubt that there is a great deal of insanity that could be prevented; and giving the profession and the medical student body better facilities for clinical study of mental diseases, as seen in a hospital of this character, would be a step in the right direction.

Editorial Notes.

Jiu-jitsu is a complicated system of trick wrestling evolved by the Japanese after centuries of trial and practice by the ruling classes. It depends upon an intimate anatomic knowledge of the joints and peripheral nerves. The wrestler tries to seize his opponent in such a way that he can twist a joint, say the shoulder, so as to give great pain. American school boys have a trick of seizing another's index finger and bending it back until pain causes the sufferer to cry for mercy, and this is typical of jiu-jitsu. It is combined with such tricks as pressing upon exposed nerves or tender spots in joints such as under the lobe of the ear, while holding the opponent in a species of chancery, or an effort may be made to choke the opponent. As soon as the antagonist relaxes his guard in a moment of pain, the other slips behind him, and while back to back, throws him over his head by a dextrous movement. While still stunned, the fallen man is seized, bound, handcuffed, or in the olden times dispatched with the sword. The system was carefully taught to all the samurai or ruling caste, but the mass of the people were kept in ignorance of its tricks. At present it is apparently used by only the police, to assist them in overpowering men much larger than themselves. — *American Medicine.*

Jiu-jitsu is advocated as a system of calisthenics, and there is at present a tendency to introduce it from this standpoint, but its dangers are so great that it would be wise for the medical profession to frown upon it. Only Japanese joints and bones can withstand such usage, and we can rest assured that if the present tendency succeeds, physicians will meet with a series of cases of twisted, sprained and permanently damaged joints and traumatic neuritis. Already there are reports of fatalities from the violent throws upon the floor, and it would seem to be more dangerous to life than boxing and football. Americans who have witnessed jiu-jitsu bouts in Japan, between native experts in their native costume, or lack of it, know that even with the floor heavily padded with mattresses, the exertion is so violent, and a man can be thrown with such force, that it is only by the greatest skill and agility that the Japs themselves escape serious injury. If one is ruined, the others, with Oriental carelessness of life, do not seem to care particularly. Physicians, therefore, should utter a word of warning whenever the occasion arises against this new fad, and though it is not exactly a yellow peril from the Orient, it bids fair

to produce more evil than good. We hope that it will not be introduced into the athletic drills of our military schools, particularly those at West Point and Annapolis.—*American Medicine.*

The qualities of a Japanese juggler are required for expertness—very flexible joints, great muscular power, a cool head, and a feline agility, which no race possesses except the Japanese, and even with these natural traits, the Jap requires several years to learn the numerous tricks, and must keep in constant practice. Europeans who attempt to become expert do not succeed, so that it is not at all probable that it can be transplanted to America and flourish. The footpad has more efficient means of attack, and the victim is not as well off as he would be with a fair knowledge of boxing.—*American Medicine.*

University of Toronto.—Faculty of Medicine. The Faculty of Medicine of Toronto University will conduct a Post-graduate Course, extending over the two weeks immediately preceding the meeting of the Ontario Medical Association. The programme from day to day will be as follows: 9 a.m. to 11 a.m.—Operations and surgical clinics in the various hospitals; 11 a.m. to 1 p.m.—Clinical laboratory methods and practice in the laboratories of the University of Toronto; 11 a.m. to 1 p.m.—A course in surgical pathology, including gross and microscopic demonstrations in the laboratories and museum of the University of Toronto; 2 p.m. to 4 p.m.—Medical clinics in the various hospitals; 4 p.m. to 5 p.m.—A course of surgery on the cadaver.

Schedule of Fees: For the course in Clinical Laboratory Methods, $15; for the course in Surgical Pathology, $15; for the course of Surgery on the Cadaver, $15; for the Hospital Clinics, $10.

The fees are for the whole or any part of a course, and all fees must be paid at the Secretary's office, in the University Medical Building, on the first day of the course.

It is requested that members of the profession who wish to take all or any of the courses should notify the Secretary, Dr. A. Primrose, before coming to Toronto.

The courses will begin on Monday, May 22nd, and will terminate on Monday, June 5th.

News Items.

CANADIAN.

DR. CLEARY is leaving Renfrew for Ottawa.

DR. BRYDONE-JACK, of Vancouver, is in New York.

THE death of Dr. Johnson of Fergus, Ont., is announced.

DR. GLEN CAMPBELL, Vancouver, has returned from Germany.

DR. STEWART ROSS, of Alberni, B.C., has located in Vancouver.

DR. PERRY GOLDSMITH, of Belleville, Ont., has gone to Vienna.

Montreal will disinfect all houses in which tuberculosis has been.

DR. BEEMER, of the Mimico asylum, attended the Osler banquet.

DR. BRAY of Chatham, Ont., has been made an LL.D. of Queen's University.

THE Montreal General Hospital is adding a new wing at a cost of $200,000.

DR. E. E. KING, Toronto, left on the 2nd of May, for a two months' trip to England.

DR. JAMES, of Watford, has gone to Edmonton, where he will establish a private hospital.

PORTAGE LA PRAIRIE, MAN., will build an addition to its hospital at a cost of $12,000.

DR. AGNEW, who formerly practised in Pickering, died recently of pneumonia at Port Arthur.

Dr. WALTER TURNBULL has gone into partnership with his brother, Dr. J. L. Turnbull, Goderich.

DRS. F. J. SHEPHERD, Birkett and James Bell, of Montreal, were at the Osler banquet at New York.

DR. NEWTON DRIER, of Vancouver, has recently received a Canadian patent on a new surgical splint.

DR. RICE, of New Dundee, has disposed of his practice to Dr. Stauffer, and will spend some time in Europe.

DR. JAMES CRAIG, of Ridgetown, who left for the North-West a couple of weeks ago, will locate at Calgary.

DR. A. E. BURROWS, who has been practising at McKellar for the past year intends moving to Parry Sound.

THE Provincial Hospital of New Brunswick, treated 716 patients during the past year, there being 141 admissions.

DR. G. N. BRODIE, formerly of Whitby, has sold his practice in Didsbury, Alberta, and is about to locate in Port Arthur.

DRS. INGERSOLL OLMSTED, Malloch, Russill and Mullin, of Hamilton, Ont., attended the Osler banquet at New York.

DR. WILLIAMS, of Lisle, has sold out to Dr. Evans, late of Uxbridge. Dr. Williams will take a post-graduate course.

DURING the week ending the 22nd of April, the Winnipeg General Hospital, treated 279 indoor patients and 110 out-patients.

THE Manitoba Medical College is to erect a new and larger college building. The site will be near the Winnipeg General Hospital.

DR. MACCALLUM, of the London asylum, has returned from New York, where he attended the banquet to Dr. Osler at the Waldorf-Astoria.

DR. GUNN, of Clinton, is gaining strength daily, and intends to leave shortly on a trip to Europe, which it is hoped will effect a complete recovery.

DR. W. H. ADAMS, formerly of Grand Valley, who went to China as a medical missionary two years ago, is seriously ill from fever in that country.

DR. BICKERTON EDMISON, eldest son of Rev. T. J. Edmison, B.A., B.D., now of Brighton, but formerly of Newcastle, has opened an office in Castleton.

DR. CHAPMAN of Newcastle, has returned to his home at Holland Landing, previous to his early departure for England to take his degree of M.R.C.S.

HENRY CHARLES SCHOMBERGER ELLIOTT, M.D., Cobourg, has been appointed Associate Coroner for the United Counties of Northumberland and Durham.

THE Toronto General Hospital Board of Management is considering the site at the south-east corner of University Avenue and College Street for a new hospital.

DR. ALEX. MACKAY of Cookstown, Ont., has been spending two months visiting the New York Hospitals. Dr. MacKay expects to locate in the North-West Territories.

DR. H. WIGLE has again been re-appointed medical health officer for the township of Albemarle—a position he has continuously held for over twenty years.

ONE hundred and sixty-three medical students wrote at the medical examinations of the University of Manitoba this spring, thirty-four of them competing for the degree of M.D.

DR. NAIRN, of Winterbourne, who, it was reported, intended moving back to Elora in May, has decided to remain in Winterbourne, much to the relief of residents in that section.

DR. ADAM H. WRIGHT, Dr. Allan Baines and Dr. Herbert Bruce, Toronto, attended the Osler banquet at the Waldorf-Astoria, New York, on the night of the 2nd of May.

DR. DUGALD MCBAIN, St. Thomas, Ont., who has been for the past few months in partnership with Dr. VanBuskirk, has decided to go west in about two weeks. He will locate near Winnipeg.

THE Toronto Clinical Society, at its meeting on the 3rd of May, elected the following officers: President, Dr. Adam H. Wright; vice-president, Dr. H. B. Anderson; recording secretary. Dr. George Elliott; corresponding secretary, Dr. W. J. McCollum; treasurer, Dr. Geoffrey Boyd. Executive Committee: Drs. King, Thistle, Dwyer, Wishart and Rudolf.

DR. MCLAY will occupy Dr. Meek's office (London, Ont.), during his absence in Europe, and will attend to his practice. He is a recent graduate of Toronto University. His home is in Aylmer.

DR. W. J. PATTERSON, of Norwood, Ont., has relinguished his medical practice there, and intends to locate in some other part of the province, where he will have wider scope for the practice of his profession.

IT is reported that Dr. Natrass, Toronto, having been appointed principal medical officer for Western Ontario in the militia, that Dr. John T. Fotheringham will be made principal medical officer for District No. 2.

DR. ALEX. MACKAY, who was at one time a member of the staff of the Stayner public school, and who has been practising medicine for some years in Cookstown, has sold his practice there to Dr. Rounthwaite, of Toronto.

THE Ontario Board of Health met in Toronto, in regular quarterly session during the week ending the 29th of April. At their next regular meeting they will discuss the advisability of a Department of Health, for the Ontario Government.

THESE appointments have been made by the trustees in Queen's medical faculty: Emeritus Professor of Surgery, Hon. Dr. Sullivan; Professor of Surgery, Dr. Mundell; Professor of Applied Anatomy, Dr. Ryan; Professor of Anatomy, Dr. Mylks.

DR. F. S. NICHOLSON, an old Trinity Medical College boy, has been visiting in Toronto. Dr. Nicholson is surgeon-major in the Nebraska National Guards, and has been taking a post-graduate course at the Army Medical School at Washington, D. C.

THE Province of Ontario is making the following allotments of moneys for support of the various provincial asylums: Toronto, $115,406; London, $146,485; Hamilton, $134,875; Mimico, $83,-110; Brockville, $92,369; Cobourg, $26,622; Penetanguishene, $42,984; Orillia, $76,852; Woodstock, $18,020.

THE Samaritan Hospital for Women, Montreal, of which Dr. Lapthorn Smith is surgeon-in-chief, held its annual meeting recently, and from the report submitted by the surgeon, 146 women had been treated in this hospital during the past year. Dr. Smith considers, that there is room in Canada for a nurse, who will work for $1.00 or $1.50 per day.

DR. LAPTHORN-SMITH, the well known Professor of Gynecology, of Montreal, will shortly begin his private course on Gynecology for practitioners, which he has been giving every spring for several years. The class is limited to three, so that pupils have a good opportunity for perfecting themselves in diagnosis and treatment.

THE Toronto Clinical Society held its annual banquet at the Albany Club, on the evening of the 6th of May. Dr. Herbert J. Hamilton presided, whilst Dr. Adam Wright occupied the vice-chair. Between forty and fifty of the Fellows and members were present, and the gathering was one of the very best in the history of these annual functions of the Clinical Society. The feature event of the gathering was the presentation of a loving-cup to Dr. Charles O'Reilly.

UNITED STATES.

CHICAGO is the healthiest big city in the world.

THE display of meats in front of butchers' and market dealers' shops in Chicago was prohibited after May 1st, 1905.

DRS. WILLIAM H. WELCH, William S. Halsted, Howard A. Kelly and William Osler, all of the original Faculty of Johns Hopkins University, will meet in London during June, and will then sit for a group portrait, to be painted by Mr. John S. Sargent.

The American Journal of Surgery is the new title of *The American Journal of Surgery and Gynecology*, of St. Louis. The publication office will be in future in New York, and the new publisher is Dr. Joseph MacDonald, jr., formerly managing editor of the *International Journal of Surgery*.

THE New York courts have disclosed a dreadful tale of fakery, and put the blush of shame upon many newspapers of that city which freely advertised the fake. A poor, hard-working carpenter who had saved, after many years of labor, $10,000 for his old age, and who was afflicted with a purely psychic disease, fell into the hands of a "specialistic cure-all," who would and could cure him by the means of radium, a very valuable medicinal agent. The poor man was literally fleeced, as it was established beyond a doubt that no radium had been used, but a decoction of ginseng, ordinary tonics and coloring matter. What a pity the carpenter could not recover from the accomplices in this crime—the newspapers.

IT has been computed that $60,000,000 have been spent for patent medicines in the United States for one year, an amount sufficient to give every physician in the American union an income of $2,000.

IN the April 22nd issue of the *Medical Record*, Dr. George M. Gould, of Philadelphia, has an interesting and able article on Visual Function, the cause of slanted handwriting; its relation to school hygiene, school desks, mal-posture, spinal curvature and myopia.

DR. WILLIAM S. THAYER, who was elected to the chair of clinical medicine in the Johns Hopkins Medical School on April 3rd, has returned to Baltimore, and will assume his new duties at the beginning of the next scholastic year. The work of Dr. Osler is thus divided between Dr. Thayer and Dr. Parker.

BRITISH AND FOREIGN.

THE illness of Lady Curzon has already cost $50,000, which is exactly one-half of Lord Curzon's salary as Governor-General of India. It is said that several famous specialists have lived for days at Walmer Castle at $500 a day apiece. Each time additional medical attendance or special medicaments were needed from London, a special train was chartered.

THE *Pall Mall Gazette* is responsible for the following: A hospital surgeon of London, England, was engaged to attend the wife of a Russian tailor residing in the metropolis. Finding that it was a purely charity case the surgeon turned it over to his assistant, although he fully intended to stay and see things out himself. This was objected to, and the assistant was refused to see the woman. Three men were called in to bully the surgeon, who put on his coat, prepared to leave. Then the husband, backed by his bullies, seized the surgeon by the throat and compelled attendance. Subsequently the husband received two months' sentence at hard labor.

SIR JAMES PAGET has followed up the careers of some 1,000 who studied in the school of St. Bartholomew's Hospital, London, England. He states that 23 have met with distinguished success; 66 with considerable success; 507 with fair success; 124 a limited success; 96 stopped studying medicine; 41 died while pupils, and 87 died within twelve years of commencing practice.

Correspondence.

HARVARD COMMISSION.

To the Editor of DOMINION MEDICAL MONTHLY :

DEAR SIR:—I was attracted by the following report of the "Harvard Cancer Commission," which appeared in the February number of your journal: "The Harvard Cancer Commission, it is understood, will report shortly that cancer is neither hereditary nor contagious, and that it is not of parasitic origin. The report will also state that excision is the only cure except in the case of small superficial growths, which may be cured by radiotheraphy."

I have closely studied the subject of Cancer for the past twelve years, and for twelve years before that I had successfully treated many cases.

About ten years ago, I advanced the idea that cancer is infectious and gave verifying data. I believe that cancer is not only infectious but also hereditary, and I know that most, if not all, cancers can be cured with or without the knife.

I will be interested to see the report of the Commission and to learn how they have arrived at the above conclusion. If they say cancer cannot be cured, they issue a challenge which will doubtless be taken up by many physicians who are successfully treating these cases by various methods.

When the internal organs have become seriously involved and general sepsis prevails, the accredited method of treatment offers little, but when the disease is confined to external parts of the body it can usually be successfully removed.

I consider that these manifestations are secondary and not primary effects of the disease, and is usually held. Preventive measures are effective in these cases as they are known to be in many other diseases.

It is evident to every one that as long as the blood remains healthy, no disease can exist. Our only hope in successfully treating cancer is to restore or re-establish a normal condition of the blood.

It is now an established fact that there are many ways of so thoroughly oxidizing the blood that the disease engendering matter within it is rendered innoxious and eliminated.

Allowing that the local manifestations of cancer are always secondary, does it not look reasonable that better results will be secured by coupling local treatment with such measures as will

purge the system of the pernicious and infectious primary conditions.

Now that we know that Bright's Disease and Diabetes are both secondary affections *and can be cured*, why should we not expect to do as much for cancer?

It seems to me that most cancer patients die from the want of some specific treatment; and, for this reason, cases are allowed to run on until they become hopeless.

One of the Harvard Commissioners recently told a personal friend that the Commission knew no more now on the subject of cancer than when it began its investigations. It would seem from this that the lines upon which the Commission has been working are as conservative as Boston herself.

G. LENOX CURTIS, M.D.

7 West 58th St., New York.

Obituary.

JOHN HERALD, M.A., M.D.

Dr. John Herald, of Queen's University, died in the General Hospital, Toronto, recently. He was admitted to the hospital on a Sunday and an operation was performed on the Tuesday following.

John Herald, M.A., M.D., was professor of clinical medicine and dermatology in Queen's University, and for several years was Registrar of the Medical School. He was a man of marked executive ability, a good lecturer, popular with the student body and had a large general practice of medicine in Kingston. He was forty-nine years of age. He was an ex-Mayor of Kingston. Interment will take place at Dundas, his old home.

Dr. Herald was born in Aberdeen, Scotland, in 1855, and was the son of the late Rev. James Herald, Presbyterian minister. He came to Canada when comparatively young, and, entering Queen's University, he graduated with honors in 1876, and received the degree of M.A. in 1880. In 1884 he graduated in medicine from Queen's. He was a member of several fraternal orders, and was Past High Chief Ranger of the Independent Order of Foresters His wife, formerly Miss Grafton, of Dundas, Ont., survives him. Deceased was a member of the Methodist Church, and a Conservative in politics.

THE DAWN.

By William J. Fischer, M.D., Waterloo, Ont.

We know not when 'twill be, but Death one day
  Will come, like some black thief in gloomy night,
  And close our eyes forever 'gainst the light
Of sun and moon and stars—then steal away,
While swift our soul speeds from her human clay
  To meet the Savour's face so tender, bright,
  Waiting her sentence, after life's drear fight—
Hell's endless night of woe or Heaven's day!

O what is life, that we should thus forget
  The joyful dawn that waits beyond the gloom
  To greet our souls, while in the cold, sad tomb
We turn to earth? Why should we doubt it yet?
There is a life that crowns Sin's battle won,
  A life of rest in far-off glowing spheres,
  Where angels sing love-hymns through endless years,
Where Christ's the Light—the soul's eternal Sun.

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And Ontario Medical Journal

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Original Articles.

PRESIDENT'S ADDRESS—ONTARIO MEDICAL ASSOCIATION.*

By W. Burt, M.D., Paris, Ont.

Ladies and Gentlemen,—I cannot fully express myself for the honor I received at your hands at our last annual meeting. My voice is not strong enough to express my appreciation of your good will towards me and my confreres from the West. I feel my inability to do justice to the position to which I have been exalted, and I will crave your patience and sympathies for a brief space of your time.

I cannot vie with those who have preceded me in this honored chair; I can only strive to emulate them. We have already an honored list of Past Presidents, and, while the time now is short when I will be with them, I feel that my interest in this Association will ever increase as the years roll by, and I can never for a moment believe that our Association will ever wane, but that its usefulness and power will increase from year to year, and that it will be a standing authority on Provincial matters concerning our profession.

I am sure we may well feel proud to-day to celebrate the 25th anniversary of our existence. We have arrived at the quarter-century mark in a very healthy and prosperous condition, and I do not fear—I feel I can be prophetic—that those who will celebrate the fiftieth anniversary of this Association will, when it arrives at the half-century mark, find that medicine has made even greater

*Delivered before the Ontario Medical Association, June, 1905.

strides during the second quarter than during the first, and that our Association will be credited with promoting in no small degree the welfare of the people. I feel that we here in Ontario would be unworthy of our noble calling if we had not brought into existence the Ontario Medical Association and given it our encouragement and support. Among our neighbors to the south, the people of the United States—I came near saying Americans, but, as is well known, we, as Canadians, claim that title ourselves—the State Association is a great factor in the building up and ennobling of all the higher ideals of life and is considered one of the best authorities on all matters pertaining to the control of the profession and the health of the people. In this I feel we should vie with our neighbors, and not be behind in any matter pertaining to the health of the province. There is no reason why Ontario should not be to the fore in the fight against the enemies of life. There is much that is of a provincial nature—the work of the Provincial Board of Health, the care of the insane, the public hospitals, the relief of inebriety, medical legislation, including medical education. A matter of no little importance, too, as it brings the members of our profession into closer touch with each other. It is to the benefit of the individual member. He cannot fail to have his mental horizon extended—in union there is strength.

It has been said that surgery has about reached its limit and that there is little left for us to do in the way of improvement. Surgery is in as active a stage as ever. While much of the work that is being done now appears marvellous compared with the work of a quarter of a century ago, there is no doubt, and many of our surgeons recognize it, that there is still in sight a great field for improvement, and that we may be looked upon as Lilliputians compared with those who will do the work at the end of the next quarter or half century. While our knowledge is actually great, it seems little after all, when we consider the possibilities of the future. When the tubercle bacillus was made known to us we were congratulating ourselves that the white plague would disappear forever. Although we are wondrous wise, we have no reason as yet to boast of any great wisdom. No matter how much we quarantine the microbes they still produce—I say this advisedly—such diseases as the white plague, enteric fever, the infectious diseases and many others, and by their flank movements get in their deadly work. On the part of the physician it will always be a fight to the finish—the French proverb, *Après la mort la Medicin*, expresses it aply—on the part of the microbe a fight to the death. The discoveries that have already been made impress us only too strongly that research work must be pursued on a larger scale than ever, and our multi-millionaires, benevolently, philanthropically inclined, in their later days at least, could not do better than aid in the great work of research. While we can felicitate ourselves

for much that has been done in the matter of serum treatment, especially in diphtheria and rabies, we may look forward to even greater things; great as these advances seem, the possibilities seem greater. The surgeon, as is well known, is too often the victim of so-called blood poisoning. It has claimed as its victims many of the most skilful and cultured of our profession, besides placing many others near the brink of the great beyond. It is needless to mention names, they are well-known to us all. There are many living to-day who feel that they have narrowly escaped the jaws of death—I might say the jaws of the microbe—and only a vigorous constitution, or a rather attenuated attack of the microbe, has spared them a few years more. I appeal again to the philanthropist to assist us in our work of research. There is no fight on now of greater import than the battle against the disease-producing microbes. As it is, I rather think the microbes have a little the best of it, perhaps a good deal the best, but I hope ere long through the work of research, aided and abetted by the lovers of humanity, that the microbe will suffer defeat, in fact, be annihilated, or at least rendered harmless. And while I am on the matter of research work, let me pursue it a little farther. It is not our ignorance of the habits of the microbe that many diseases are prevalent; take for example the somewhat common disease of diabetes mellitus—how little is known concerning its origin, its prevention and successful treatment? And again, take the epileptic—their number is legion. There are being, very properly, sanatoriums established for their care and maintenance. We are well aware that the great majority of epileptics are epileptics to the end. These are simply examples to show what a great field there is for research work other than what the microbes give us. It would be well if many of our clever gold kings would study medicine, and pursue with their surplus wealth the great field of research. I think it would be better if they would use it for the establishment of schools for research work, wherein those who are known in our profession for their abilities may pursue the work. We are well aware that a school of this kind has been established in Washington by the king of the iron industries. While I am not jealous of our neighbers—I am indebted very much to them—I would like to see in this fair province of ours a school for research work in medicine that would be untrammelled, unfettered by the want of financial support. This is not unreasonable. It was through the air of Ontario that the telephone wire first came into use—not in one of our large centres, but from a country residence, Tutela Heights—to the now City of Brantford. I can recall how I was thrilled when listening in the first Brantford Office to music produced at the country residence of Prof. Bell.

Canadians have already done considerable research work. While it may be that research work can be carried on in our larger cities

to greater advantage, it has been well shown that in preparing the student for research work many of the smaller schools do as efficient work, if not more so, than the larger ones. Personal supervision of the teacher is one the greatest helps in preparation, and this, as a rule, is better carried out in the smaller schools. However, our larger schools, by increasing the staff, are giving recognition to the fact that individual attention is one of the greatest helps to student life. Many of the improvements and advances in our profession have not been due to the laboratories of our Universities, but have been thought out during the daily rounds, let me say, of the country physician. I ask you to recall Ephraim McDowell.

Not to be behind our smaller cities in Ontario, Toronto, everyone will be glad to know, is about to make a great effort to be up-to-date in the matter of hospital extension and library work. There is no doubt that, if successful in their undertaking, research work will receive a great impetus. While it may seem a matter of great renown for him who succeeds in the field of research and gives to the world something new, it is no less praiseworthy for him whose lifework consists in administering all that is latest and best for the relief of human suffering. There may be a scintillation of truth in the fact that if a man has little desire to enter the field of research before middle life he is not likely to do much after, but it is an incontrovertible fact so far as the application of what is already known to be beneficial, to be helpful for the relief of suffering humanity, the powers of the physician, his experience, his judgment, his power of discernment, increases as the years roll on and do not cease until disease or a ripe old age superannuates him. The author of "Bonnie Brier Bush" tells us that it created a scandal in his country for any citizen to "slip awa'" before sixty, and that persons above ninety were understood to be acquitting themselves with credit and brushed aside the opinion of seventy as immature.

You will agree with me, I am sure, that the sum of human happiness could be materially increased by the stamping out of some preventable diseases—diseases that may be totally avoided, diseases that are under the control of the indivdual and society. The gynecologist, the genito-urinary surgeons, the neurologist, will tell you that a great deal of their work is due to the gonococcus and syphilis. What diseases more loathsome? You will admit, I am sure, that these are preventable diseases. What diseases are more contagious? What diseases leave their dire results in the human system more than these do to be handed down to the third and fourth generation? And yet they are preventable, wholly preventable. It is not for me to discuss the phases of social life that produce these, but in many instances useful, innocent lives should be protected. It is true in the practice of our profes-

sion, in operations on the syphilitic, numbers have been inoculated and lives of usefulness marred. What more obnoxious than a syphilitic with mucous patches or an epithelioma on his lips, or a specific sore throat, offering his pipe to a comrade or participating in the Communion in any of the Christian Churches where the individual cup is not used. I feel sure if the laity could understand the disastrous results of oral sepsis, there would be no dissenting voice in the use of the individual Communion cup. The physician can evidently curtail much misery, but he needs the help of the public to stamp it out altogether. It needs a greater concern on the part of every one in social and moral reforms, a cultivation of higher ideals. You may attribute it to ignorance or want of education. These are but scapegoats. If it is due to want of education, then let me say that the people of our large centres are lamentably ignorant, and just here I beg to state in my opinion the ends of justice would be as well secured by taking the oath with the hand uplifted, as that impure method of kissing the Bible—a Bible that has done untold service. What more impure? To return again to the disease-producing germs, a well-known characteristic of the microbe is that it is cowardly, it will not attack many subjects unless their systems become weakened, as is the case of many young people, from want of proper nourishment, from living in closely-crowded, ill-ventilated tenement houses, or from working longer hours than is consistent with a healthy system. It is acknowledged that these are factors that go to swell the victims of the white plague. If people were to fall in love with fresh air, sunlight, wholesome food and cleanliness in their youthful days, and regulate their hours of work as much as many do after contracting the disease, the demand for sanatoriums would be much less. A great interest is being taken in the erection of sanatoriums for pulmonary phthisis, and, while I hope that it may continue, I feel that the work in this direction should grow less and less from year to year as the death rate becomes reduced. The great arteries which keep up the supply of consumptives, pulsate stronger and stronger in many places. If ever we can boast ourselves a great people, and vie with other nations, if ever we can sustain the reputation of our country for prowess, for culture and refinement, it will be by so altering, so modifying the strenuous life that we live that we shall not permit any feeding grounds, any culture grounds, for the microbe that we shall be able to remove all sources of the dread malady. It does seem that while great efforts are being made for the cure of the afflicted, our thoughts, our energies, are not sufficiently concentrated and aimed at the faults of our national life in many respects.

You are all familiar with the harrowing details of the lives of the children in the coal regions of our neighbors to the South during the great strike of the miners three winters ago. I need not

repeat here that these mines were veritable hot-beds for the spread of the white plague. The coal mines are not the only culture grounds for the dire disease. I may refer you also to the culture beds of the cotton mills of the North and the South, where child labor has been and is much in evidence. But why, you may say, am I talking about my neighbors? Are we as a Province free from the culture beds? As you are aware, I belong to a town which is noted for its woollen industries. It possesses the largest woollen mills of our fair Dominion. I would like to say that our civilization, our christianity, was of that type that we could boast that we are abreast of other people ; other nations, that we are living in a land where there are no culture beds—no culture grounds—for the white plague, in a land where child labor is unknown, and where our neighbors cannot point at us the finger of scorn. My fervent prayer to-day is—would it were so. After all, the churches that we see towering above us, the magnificent works of the architect, after all the efforts of our various leagues with their Christian influences, after all the sermons that are preached and prayers offered up, to say that we are living in a land where child labor exists is to say that a most lamentable condition of affairs exists, and that our neighbors can point at us the finger of scorn, and that we, too, lack much that might strengthen and support the props and bulwarks of a great country. We are much indebted to some of our noted women for some of the greatest reforms the world has ever seen. What was it, I ask, moved the world to the abolition of slavery more than anything else, and made Lincoln free the slaves, if only as a matter of military expediency, if not the writings of the author of Uncle Tom's Cabin? No one has written more strongly or more pathetically on behalf of growing childhood than Mrs. Browning in "The Cry of the Children." I will give you but two lines :

> "And they look up with their pale and sunken faces
> And their looks were dread to see."

And yet there are those who cannot see that the factory labor of children is slavery. In Greater New York, we are told, some sixty thousand school children go hungry every morning to school. It is needless to say they are unfit for their work. In great London, we are told, the number is vastly greater. In Toronto—well the latest report has not been handed to me. In regard to this matter a prominent weekly paper, published in Toronto, states : "Of the many terrible things in some of our great cities, this is one of the most awful to contemplate." I need not enlarge on this subject. The results are self-evident. Is it any wonder that many systems are vulnerable to attacks of the white plague and other diseases? The work of prevention seems almost insuperable, but it should not be so. If we could but eliminate from the make-up

of the individual and our nations' representatives the words "grasp," "graft" and "greed," and we possessed more of the altruistic spirit, our national life would be in a more healthy condition and the jails and the tombs would have fewer occupants. If our children are starved, our nation cannot be well developed. We must build up a nation by building up the individual. We must have a sound body for the in-dwelling of a sound mind. Inasmuch as a nation is made up of individuals, as matter is composed of molecules, the perfection to which we bring each individual goes far to establish on a firm basis, the bulwarks of a nation. Any nation that will permit or encourage child labor is bankrupt, morally, socially and politically. With the lamentations of the mother and daughter ringing in our ears, may Canada show forth to the world her greatness, her godliness, and emancipate this fair province of ours from the disastrous consequences of the white plague, and may we be first and foremost in this respect among the nations of the earth. It would go a long way to strengthen the bulwarks of our nationality and help to produce a healthy, happy and contented people.

I would not like to admit that in the early history of the world physicians were a much better class than exists to-day, but it is indisputable that in olden times people lived as many hundred years as they now do tens. How is it? I would not like to say that they had better Boards of Health. I can only answer that there is a Divinity who is the author of natural laws, that natural laws are Divine laws, that there may be an alteration in our well-known laws governing youth and old age by the Divine will, and that the cycle of life of the present time, as compared with that of the olden times, is a vivid illustration of the fact. Natural laws are God's laws, and if the Almighty sees fit to change the laws, the properties of matter, it will be done as it was done in the shortening of the natural period of our lives.

I feel that I would not be doing my duty if I did not call your attention to a most pressing matter, that of the indigent and wealthy inebriates. This subject should not be disregarded or passed over lightly. The Ontario Society for the Reformation of Inebriates should receive our strongest support, and I sincerely hope that the Government of to-day will see its way clear to aid this Society, and help to carry on the work which it is endeavoring to accomplish. While here again the prevention of inebriety should not be lost sight of, a great advance would be made in the citizenship of our Province if we were to put in force the measures adopted by Great Britain and the United States. It is well recognized that what many an inebriate needs is to be placed where he cannot have the source of his trouble, and be treated with that sympathetic kindness that he needs, and he will be grateful for the help given him. No one can help feel, if the wishes of society

be carried out, another strong prop would be placed in our nation's manhood. But I would go farther—I believe that the wealthy inebriate would be very grateful if taken care of. The inebriate in many cases only requires to have the proper restrictions enforced. The inebriate himself frequently desires the restrictions, and there are cases where it may be said that the inebriate has lost his self-control, has not sufficient moral force left to impose the restrictions himself, and what is needed is that he shall be taken charge of by his friends and the restrictions carried out for him. This cannot, as a rule, be done without adopting some one or all of the measures the Society has proposed. I hope that the indefatigable worker of the Society, Dr. Rosebrugh, and the other members, will soon have the satisfaction of knowing that their efforts in this direction will be crowned with success.

Another matter that should not be lightly passed over is lodge practice. In regard to lodge work I have long since expressed my views. Some may say that I should not express myself, because I have never taken up lodge practice—it is not necessary to practice an evil to know the evil. The so-called free attendance is no doubt a drawing card on the one hand, and the prospect of an immediate clientele of patients, an alluring bait to the young practitioner on the other. My own opinion is that lodge practice has no redeeming features. Not many years ago the Supreme Chief Ranger of one of the fraternal societies, in one of his addresses, stated that the free medical attendance—I do not use the term "free" absolutely—saved his order some millions of dollars. I only wish to state that this would have been a nice fund for the fatherless and the widows of the deceased members of our profession. It is only too well known that many in our profession, faithful workers during their lifetime, have left but a pittance to their loved ones. I do not hesitate to say that both the fraternal societies and the physicians would be on a more enduring basis, on a more solid foundation, if the societies had their benevolent funds with the lodge physician left out. It is so in many, if not all, of the United States, and from them we might well take a lesson. And just here I would wish to state what will commend itself, I am sure to every one, that in many cases a trained nurse should be engaged by the order instead of drafting members who have been at work all day to do more work at night. The interest of the patient demands it, and just here let me state that a great deal of the success of the physician is due to the trained nurse. The trained nurse has come to stay. If anyone wishes to pursue this subject further I will ask those of you who have not read the last chapter of Dr. John Beattie Crozier's work on "My Inner Life," to do so. There you will find a better statement than I can give you, and in the language of a well-known writer, of the disastrous results of lodge work or club practice as it affected him in his home in Eng-

land. Dr. Crozier is a graduate of Toronto University of '72, of the same year as our lamented Zimmerman. Our Osler was of the same year, but left us for McGill at the end of his second year. Dr. Crozier, as many of you are aware, was an old Galt boy, and is now receiving an annuity from the British Government for his work as a philosopher. Crozier's work at the G. G. S. helped to stimulate many a less apt student. He has done much research work, but it was hunting for an ideal. Had he turned his attention to medical research I have, no doubt, no microbes would have kept out of his way. I think, however, you will find his writings in regard to lodge work solid. Crozier is one of Canada's famous sons, of whom we have great reason to be proud.

A short reference to another subject and I am done. You are well aware that there could not be a more important subject than public hygiene, and especially that part of it which comes under school hygiene. It needs a great deal more attention than has been paid to it. The hygiene of the schools is in a somewhat crude state, and a little more attention would bring the sanitation of our schools up-to-date. Our knowledge of what is required is not deficient. It seems a matter of neglect, pure and simple. A minister of health, which we have not yet, would be one of the most important portfolios that any government could have. Good health is one of the greatest assets that an individual or a government can possess.

Many subjects I must leave untouched. It is well understood that in the medical profession there must be a division of labor, but whatever department we pursue, we must do so with "prudence, promptness and patience." These are the graces of the soldier, so well described by Miss Harris. They may well be the graces of the physician, for the practitioner of medicine, in its widest sense, is a soldier always, a combatant, fighting the enemies of life, striving to keep death as far off as possible. Even on the battle field he never shrinks from danger, he is doubly, thrice-fold, a combatant—a parting word to doubting ones. The thought that the cycle of life, changed as it is to a short period, is manifestly due, not from any want of skill on the part of the medical profession, but to a Divinity, to God alone, does not need a very strong faith to believe. It is proof itself, and if we believe in this great change of the cycle of life, why can any one take exception to the Immaculate Conception, the Resurrection and the Ascension? Contrary to much that has been said of the physician's belief, he has certainly been one of the strongest supporters and exponents of Biblical history. We have been placed here to work out many problems, and if we make use of the means of the research that has been given us, the mist and the clouds which hang over us, may be cleared up and it will be given us to know much of what is seemingly mysterious. We have no conception of such phrases as

boundless space or *in the beginning*. It may be given us to explain much that is now mysterious, but it will only be done by honest, faithful work, not by the methods of so-called Christian Scientists, but by the labors of those who will enter the great field of research work into nature's laboratories and the special laboratories for research.

APPENDICITIS IN RELATION TO PELVIC DISEASES AND PREGNANCY.*

By A. Lapthorn Smith, M.D., M.R.C.S., (Eng.).

Surgeon-in-Chief of the Samaritan Hospital for Women ; Gynecologist to the Montreal Dispensary to the Western General Hospital and Consulting Gynecologist to the Women's Hospital, Montreal ; and Professor of Gynecology in the University of Vermont, Burlington. Fellow of the American, British and Italian Gynecological Societies.

That no machine is stronger than its weakest part is an axiom which may be accepted without argument. Our beloved and revered Oliver Wendell Holmes described a machine which was so well constructed that it had no weakest part and which all went to pieces at once ; but that was a poetic license. As a matter of fact the axiom is true, and were it not for some weak link which breaks first every chain would hold forever.

The human body is the most complicated piece of machinery that has ever been constructed, and were every part used as nature intended it to be there would be no weakest part and it would go on working much longer than it does. But unfortunately owing to changes from the natural to the artificial modes of life there are some parts of it less used than others, and these parts become the weakest ones. Although we have fallen into the erroneous habit of speaking of work as being a cause of disease, we will generally find on closer analysis that it is really idleness of an organ that kills it. If we walk on our legs they become stronger, but if we hire another man to carry us his legs become stronger and ours become weaker. If we masticate our food from childhood up we will have a jaw big enough to hold all our teeth and the latter will be sound ; but if we have our food masticated by machinery, or if we swallow it without mastication at all, our jaws will become smaller so that there will not be room for our teeth, while even if some of them are removed so as to make room for the others, the latter will

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* Abstract of paper read before the American Gynecological Society, Niagara Falls meeting, May 24th, 1905.

be poorly nourished and are easily attacked by the bacteria of decay.

Owing to our present methods of living the vermiform appendix is the least used part of the human mechanism. From our knowledge of comparative anatomy we can safely conclude that at one period of man's history the appendix of the cecum was such an important organ that a human being who had one the least bit shorter than his neighbor's had a slightly lesser chance of surviving in the struggle for existence. At a time when one had to consume enormous quantities of coarse roots and leaves, which was the only food to be had during the winter, the man who was a few quarts short of appendical juice was soon left behind in the struggle; he had fewer children to inherit his appendical shortcoming; while the one who had an extra long one flourished accordingly, and handed his appendical advantage down to a numerous progeny. Just as we say now that an army crawls on its stomach there may have been a time in man's evolution when his success in life depended on the length of his appendix. Now all this has been changed; our ancestors began by picking out the roots that were most easily digested and then they stored up nuts and other fruits to last them through the winter, with the result that they could get along very well with a few inches less of appendix When they took to eating meat and other foods which were digested in the stomach the appendix became a few inches shorter, and when they began to cook their food so that it was digested before it reached the cecum the *raison d'etre* of the appendix ceased altogether. So that at the present time, Sir Wm. McEwan's high opinion to the contrary, notwithstanding, it is not only of no advantage to have a long appendix, but, on the contrary, it is a handicap and source of danger to have one at all. Indeed it is quite conceivable that it may only be a question of a few thousand years for the cecum itself to follow its five-foot appendix into the historic realms of things which have been. We may safely say that there is no organ in the human body, not even excepting the coccyx, which is less used than the vermiform appendix is to-day, and being the least used it is by long odds the weakest.

An organ which is weak even in the healthiest, must be still weaker in the unhealthy. Who are the unhealthy? Those who are deprived of fresh air, sunshine, proper food and exercise. Here we have the explanation of the truth contained in the well-worn joke, that it is fashionable to have appendicitis because most of the wealthy people have had it; and it also explains the unjust accusation which we so often hear, that appendicitis was invented by the doctors in order to reap a harvest of operation fees. The reason why the rich woman in the city is a fit subject for appendicitis is because she is the most unhealthy specimen of her race, for she habitually gets the smallest possible amount of fresh air, sunshine,

proper food, and exercise. Anyone who knows her mode of life must admit this; losing several hours of sunlight while she is sleeping late in the morning, several hours more while driving about in a closed carriage to darkened stores, and all the while attending lunches and card parties from two to six in the afternoon. As for air, what with the doors and windows of her bedroom closed, what with the overcrowded condition of the badly ventilated shops, the still worse ventilation of the lunch and card-room during the afternoon, and the dining-room and theatre in the evening, who can get less air than she does? As for food, many of the items on her bill of fare are lacking in the proper elements, and even if the exhausted woman had the right kind of food she could not digest it, and hence another source of weakness. But it is for want of muscular exercise that the rich city woman suffers most of all; the muscles of the arms, legs and abdominal muscles, all have their work done for them by paid substitutes, while the exercise of the heart and lungs is reduced almost to the vanishing point. Can any one say that such a woman is healthy even before marriage? But when she marries and becomes either infected or pregnant, or in some cases both, she becomes one of the weakest specimens of her race. Is it not evident that if any one is a suitable subject for the decay of her least used organ, she is that one. There are many thousands of such women, and they would all do well to have that useless organ removed before they embark on the perils of pelvic disease or pregnancy. For in all of them the appendix is on the verge of decay and only waiting for a temporary increase in the number of colon bacilli for it to be attacked with ulceration, perforation and gangrene. When the heavy and badly-nourished appendix drops down into the pelvis and touches the infected tube, adhesions are formed which we so often find attached to the latter when we are operating for its removal.

During pregnancy the digestion, which may have been outraged for years, breaks down completely and the appendix is then worse nourished than ever. Peristalsis is inverted; there is vomiting and obstinate constipation, a condition in which, by actual experiments, the number of colon bacilli is enormously increased. Their function in the economy is to disintegrate dead or dying organic material; if they are not too numerous and if they remain in the intestine they do no harm; but when the latter or any part of it becomes weakened, the colon bacilli migrate into its walls and cause ulceration. If the circulation of the patient is bad and the quality of the circulating fluid is poor there is nothing to prevent the ulceration from going on to gangrene and perforation with its general infection of the peritoneal cavity. If, on the contray, the quantity and quality of the circulation is fairly good phagocytosis takes place and the weakened appendix is strengthened and walled

off by adhesions consisting of organized lymph and omentum and the general peritoneal cavity is saved.

Considering how near the appendix is to the pelvic organs and how often it is affected by the same causes which affect them, such as constipation, poor circulation, etc., and remembering that an infected appendix may dip into the pelvis and infect a congested or inflamed Fallopian tube even of the left side and in view of the lessened resistance of the economy in general, and of the appendix in particular, during pregnancy under modern conditions the writer believes that many cases of supposed pelvic disease and puerperal septicemia are due to disease of the appendix. In the case of the Fallopian tubes I am sure of it for in more than a dozen cases when I have been operating for the removal of pelvic abscess I have found the right tube, and in one case the left, with the appendix imbedded in the adhesions. I have had no death in my midwifery practice since twenty years, and before that time, although I had two from general peritonitis, we did not know enough about the appendix to even suspect that it might have had anything to do with the condition.

But the literature contains many authentic cases of appendicitis during pregnancy, and when I look back on my experience of many pregnant women who complained of pain in the right side, I am convinced that many of them were suffering from mild appendicitis or from the dragging upon adhesions of the appendix to the right tube, to the uterus, or to the wall of the pelvis. If this point were especially looked into by those who have an opportunity of making *post-mortems* on women dying during the last week of pregnancy, much light might be thrown on the subject of these severe but ill-defined pains which so many pregnant women complain of.

As all our studies and deliberations lead up to the one great end, viz., that we may give our patients better preventive and curative treatment, let us inquire what should be our treatment in these cases so that we may the better relieve suffering and save life.

Perhaps in no department of medicine has greater progress been made during the last twenty-five years than in the treatment of pelvic diseases and in the care of the pregnant woman. Previous to that time removal of pus tubes, tubal pregnancies and of tumors of the uterus and the ovaries, while they were yet small enough to remain in the pelvis, was very rare. At that time it was no uncommon thing to see a woman with a pelvic abscess which was allowed to burst into the bladder, rectum, or vagina, and even through the abdominal wall, die from prolonged and exhausting suppuration. At that time, too, it was the exception to give the pregnant woman any treatment whatever until she sent for her own or any other doctor to attend her in her confinement. In both these respects a great improvement has taken place ; pus tubes are now recognized before

irreparable damage has been done by the protective adhesions thrown out by nature, at least before disastrous rupture has taken place into other cavities. While the pregnant woman is receiving more and more attention earlier and earlier in her pregnancy, in order to prevent as well as to remedy the ills which modern methods of living are bringing upon her, there yet remains much to be done, and in no direction more than in the direction which forms the subject of this discussion.

So that with all due conservatism the writer feels convinced that in all operations for pelvic diseases the vermiform appendix should be suspected, examined, and if found guilty removed. And women who are known to have appendicitis should be urged to have it removed before marriage or at the latest before the third month of pregnancy if it causes trouble. While the writer does not wish to go quite as far as that, still he thinks that it is a question worthy of discussion whether it would not be better to remove the appendix at a time when there would be no death-rate, from those women who are almost certain to require its removal sooner or later and in whom a late operation gives such a high mortality.

If the above data are correct, and of course they are open to criticism and correction, we know fairly well what kind of women are almost certain to be attacked with appendicitis, and in them at least an ounce of prevention is worth a pound of cure.

REPORT OF A CASE OF CARCINOMA OF STOMACH.

By W. J. McCollum, M.D., Toronto.

The following are the clinical and pathological notes of a case of Carcinoma of Stomach. The case was reported to the Toronto Clinical Society at the November meeting, 1904, when the patient was presented. The pathological specimens were presented at the February meeting, 1905:

James S——, aged 44 years; born in Scotland, and a resident of Canada for past eight years.

Family History.—Nothing important; no history of Carcinoma.

Habits.—Carpenter by occupation; heavy drinker for past ten years or more.

Past Illnesses.—Has always enjoyed good health; never had any serious illness; never suffered from dyspepsia.

Present Illness.—Was in perfect health up to March 20th, 1904, when he had a very severe hemorrhage from the stomach. This

came on, without any previous warning, about 10.30 on a Sunday night, as patient was undressing. He felt a sensation of nausea and went to the bath-room to vomit, where his wife heard him fall and found him in a state of unconsciousness. I saw the patient shortly afterward and found him much collapsed, very pale, with a rapid pulse. He had vomited about a quart of bright red blood.

Abdominal examination at this time was absolutely negative; no tumor, enlargement of liver, or any gastric or intestinal symptoms.

Patient recovered quickly from effects of hemorrhage, and after remaining in bed ten days, he resumed his work at end of three weeks, in apparent perfect health and with a weight of 156 pounds, the heaviest he had ever weighed.

I did not see patient again, after April 10th, until July 1st, when he came to my office During this interval he had been working steadily, but when consulted on July 1st he was much reduced in weight (loss 25 lbs) and was feeling weak and unable to continue his work. Complained of absolutely no gastric symptoms except loss of appetite, had had several attacks of weakness, followed several hours afterwards by tarry stools.

Examination of abdomen at this time showed liver dullness normal, lower border of stomach about one inch above umbilicus. In upper part of abdomen to left of middle line, and just below left costal magin, a sense of resistance could be felt, over left rectus muscle, but no dullness or tumor could be detected.

Examination of Stomach Contents.—Complete absence of free Hcl.; no lactic acid or Oppler-Boas Bacillus. Tube passed without difficulty. Diagnosis of Carcinoma of Stomach situate away from either orifice was made.

About 10th of July patient went to Boston for a trip and did not return until October 10th. In Boston he was examined by several physicians, and was told he had no cancer of stomach but was suffering from anemia. I saw him again on October 18th and sent him to St. Michael's Hospital.

Examination at Hospital.—Patient much reduced—110 lbs.—marked Cachexia; blood examination showed Haemoglobin 50%. Patient complained chiefly of weakness and pain in right upper abdomen, no vomiting or gastric symptoms, no hemorrhage, bowels regular, appetite poor but no difficulty in swallowing.

Examination of Abdomen.—Liver dullness increased to about four inches below right costal margin in mammary line, marked bulging in upper part of abdomen on right side. Palpation reveals a tumor extending about four inches below ribs on right side, smooth, and moving with respiration; small firm mass felt on left side, below left costal margin. This can only be palpated during deep respiration.

Stomach extends below to a line about one inch above umbilicus.

Examination of Gastric Contents.—Absence of free Hcl.; no lactic acid or Oppler-Boas Bacillus.

Examination of Thoracic Organs.—Normal.

Examination of Urine.—Normal.

P. M. Examination, Jan. 6th, 1905.—Primary Carcinoma involving anterior wall and lesser curvature of stomach, pylorus and cardia perfectly free. Immense secondary growths in liver, which practically filled the abdomen and extended below crests of ilium, secondary growth also present in pancreas, and transverse colon.

The points of interest in this case were :—

1. Initial Symptoms—Severe hemorrhage. This occurred in the absence of any gastric symptoms whatever and without any warning. With a history of alcoholism it suggested cirrhosis of liver.

2. Absence of gastric symptoms throughout whole course of disease; patient only had two or three vomiting attacks from beginning of disease to the end. There was no flatulence or distress or pain after eating. Cancer of the stomach, when not situate at either orifice, may give rise to few gastric symptons.

3. Early and persistent absence of free Hcl. This was found to be absent early in the disease, before any tumor could be detected, and in the absence of any gastric symptoms except a history of hemorrhage and a loss of weight. It was certainly of considerable aid in making an early diagnosis.

4. Absence of lactic acid and of the Oppler-Boas Bacillus.

Though frequent test meals were given lactic acid was never detected, nor was the Oppler-Boas Bacillus. The explanation of the absence of lactic acid is probably the absence of stagnation in the stomach due to no pyloric obstruction.

Selected Article.

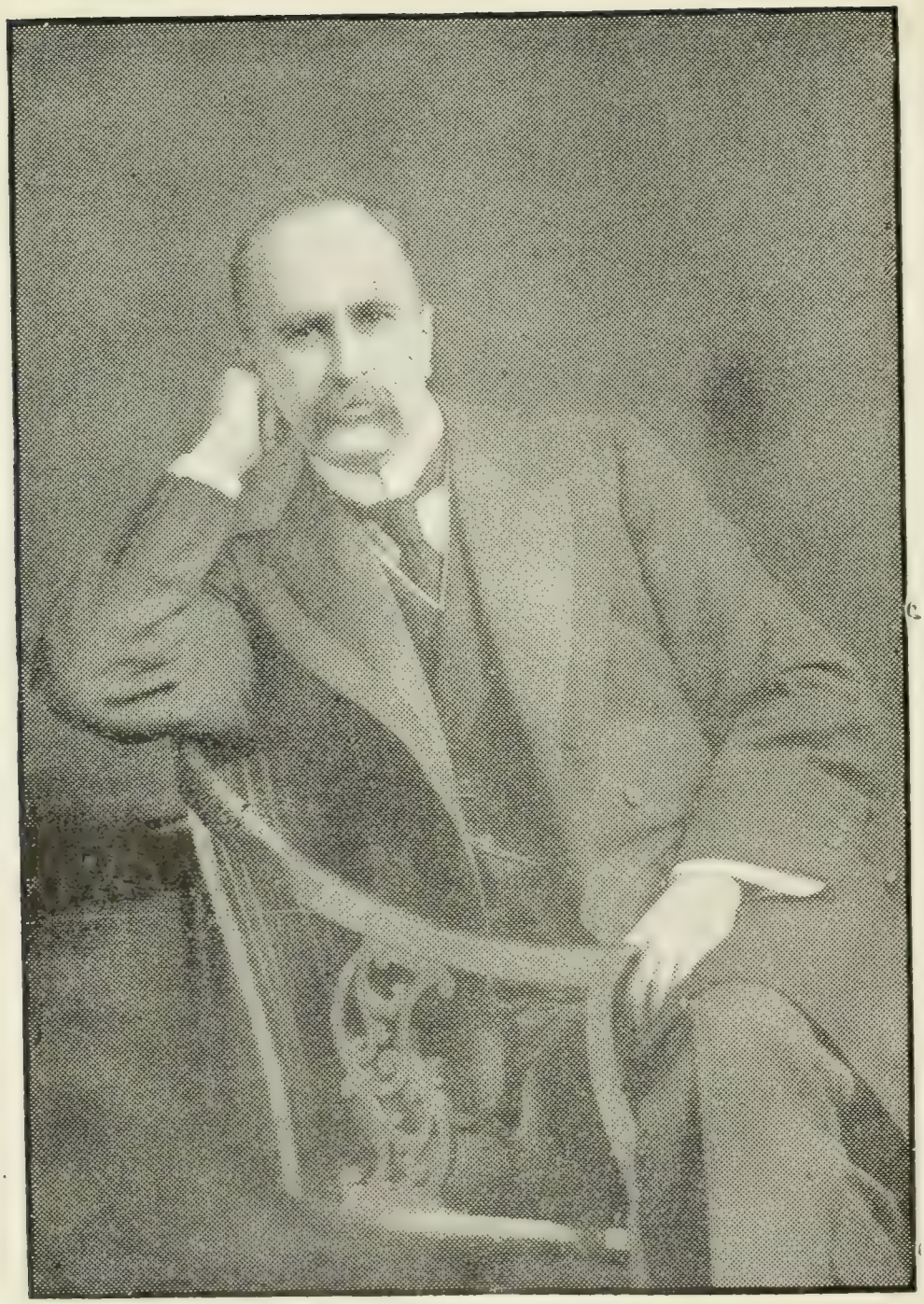
THE OSLER DINNER.

ON Tuesday evening, May 2nd, at 8 p.m., more than 500 physicians from many parts of this country, Canada, and one from Cairo, Egypt, sat down to the farewell banquet, given in the ball-room of the Waldorf-Astoria, in New York City. The guest of honor was Prof. William Osler, and the occasion for the banquet his approaching departure to take up the duties of Regius Professor of Medicine of the University of Oxford. The occasion proved a most happy one, perfect in all its details, and the Committee deserves the thanks of the medical profession for the care that must have been exercised to make the evening so thoroughly pleasant.

The toastmaster of the evening was Dr. James Tyson, of Philadelphia, one of Professor Osler's oldest friends, and the one who wrote the letter of invitation that brought Professor Osler from Montreal to Philadelphia, and gave him the opportunity for the larger career which has stamped his personality on American medicine.

Professor Tyson said that Dr. Osler had very naturally, because of his career in Canada as well as in the United States, attracted the attention of physicians all over the country in the broadest sense, and had had an influence wider than any other medical man of his generation. This influence is due not alone to his medical character, but to the breadth of his intellectual sympathies and to the classical, biblical and poetic laws with which his name has always been associated, and which he knew so well how to make subservient to his purposes in the illustration of great principles of medicine. In introducing Dr. Shepherd, Dr. Tyson said that Dr. Osler's oldest friend would be better able than any one else to tell the story of the guest of the evening as a student and teacher in his younger days.

Student and Teacher.—Dr. F. J. Shepherd, of Montreal, spoke of Dr. Osler in Montreal, and said that in spite of the passage of thirty-five years since they graduated together in 1870, Osler looked no older, scarcely, and was not at all changed in disposition from the medical student that he at first learned to know. As a student Osler had been known, not for devotion to his books, nor as one whose main effort was to succeed in passing his examinations, but rather for his attention to the post-mortem room, and to whatever hospital work he could succeed in getting, though these features of the medical course were much less prominent than they are at present. While a serious worker, he was never looked upon as one of those who, in the modern term, was a "grinder," but on



DR. WILLIAM OSLER.

REGIUS PROFESSOR OF MEDICINE OXFORD UNIVERSITY.

the contrary was known and loved for his social qualities, for the kindness of his disposition, and for the numerous friends that he made. In his young days there was the characteristic grain of humor that has so often been exhibited in after-life. While he did not graduate high in his class, there is a special note in the proceedings of the convocation, the Canadian name for commencement, which shows how thoroughly his medical studies were appreciated by the faculty. A special prize was awarded to Dr. Osler's graduation thesis because of the originality it displayed and the research it evinced, and because of the collection of pathological specimens accompanying it, which were presented to the Museum. In the light of his after studies, it is interesting to note that some of these specimens, still in the college museum, concerned the ulcers of typhoid fever. When next Dr. Shepherd met Osler, he was engaged in writing the thesis of the Royal Society of England, of which he had become so highly honored a member. During his teaching days in Montreal, Osler was known for his devotion to his work and his faithful attendance at medical society meetings. His success as a teacher was in accordance with the efforts which he put forth and the interest displayed in his work. He became an inspiration for his students, and was able to rouse interest in original investigation on their part, such as had never before been seen. His personal magnetism enabled him to gather around him a group of young men, all of whom felt the precious stimulation of his own abiding interest in all medical problems. In other words, even in these early days before he was thirty, Osler displayed the qualities which later were to make his influence felt far and wide in the medical profession here in America. He did not allow his practice to trouble him very much at any time in Montreal, and if he kept office hours those at the college were not particularly aware of the fact. He never kept a chariot and, as he used to say himself, this was probably for the benefit of mankind, since those who ride in chariots kill their hundreds, while those walk kill only their tens. His influence for good over the students in Montreal was felt far beyond the domain of their scientific education, and there is many a young man of those days who felt that he owed to Osler the turning point in his career that made him realize the value of high ideals in life. It is no wonder that he left Canada then with the good wishes of his colleagues in the college, of his students, old and recent, and of the medical profession who had learned to value him. Now that he has united the professions of the United States and Canada by the sympathetic qualities of his genius, his Canadian brothers will indeed welcome him back to the Mother Country, feeling that another stage of his evolution had been passed that would make him even more broadly useful.

Dr. Osler in Philadelphia—Teacher and Clinician.—In introducing Dr. J. C. Wilson, of Philadelphia, who spoke to the toast of

"Osler in Philadelphia as a Teacher and Clinician," Dr. Tyson said that though Philadelphia had long been considered the medical center of the United States, there was no doubt in the minds of those who were best in a position to know, that Dr. Osler's coming to Philadelphia marked and era in Philadelphia Medicine.

Dr. Wilson said:

In the face of this programme I cannot express surprise at being called upon to address you, nor can I indulge in the ancient apologies for lack of preparation for an unexpected honor. I may say to you, however, in confidence, that for some weeks I have wondered why I was selected for this purpose and what I am expected to say. During this time I have often thought of the country minister who, finding himself somewhat ahead of his congregation, started to pray in the empty church with much fervor and in a loud voice for *force*. As he was about concluding one of his deacons, coming in, said to him, "Parson, you are praying for the wrong thing; you don't want *force*, you want *ideas*."

We cannot think of Dr. Osler in Philadelphia without thinking of him before he came to us and since he left us. His whole previous career was a preparation for his work there; his half decade of work there was, it now seems, a necessary period of training for the great decade and a half at Johns Hopkins, and the rounded half century since he left off knickerbockers a complete and progressive course of development and preparation on this side the Atlantic for the crowning period of an illustrious life upon the other side. No part of it could have been left out.

Shakespeare's "Home-keeping youth are ever dull of wit" has the fault of most sweeping generalizations. It is true, they mostly are. But not always. It depends upon the home. Populations have left New England, but who ever heard of anyone leaving Boston? Yet the Boston wit retains the old flavor. From most other places the bright spirits migrate. It has been said that the test of the true American is the impulse to move on. If this be true, Dr. Osler is the very type of an American. And the remarkable thing is that the farther he moves the more he is missed. There is no authentic record of the state of mind of that far settlement of Ontario which he left in early infancy nor of the nature of the repast by which his departure was celebrated. But when he left Toronto there was tears and sorrow and something to eat, and when he left Montreal, the same with singing, and when he took his departure from Philadelphia we had emotions which we could not suppress, together with terrapin and champagne; and now that he is going to leave the country there is universal sorrow and the largest medical dinner ever cooked. Yet there he sits, the embodiment of that imperturbability which he has so charmingly described as a medical accomplishment, but which we know to be essential to the mental make-up of a peripatetic philosopher.

I may be permitted to speak of Dr. Osler in Philadelphia from two points of view: First, the influence of our quiet Quaker life upon him, and, second, his influence upon us.

First, then, we at once sought to make a practitioner of him. But of that he would have none. Teacher, clinician, consultant, yes, gladly; but practitioner—no! and that with emphasis. This was partly due to his knowledge of affairs, partly to his temperament. One star differeth from another star in glory. His light was to be bright and guiding, and seen of all men. Not for him the dim and shaded light of the sick room, the patient daily service to the weary sufferer, the tiresome round of daily calls, and vexatious failure of the approved method to accomplish the desired result. He recognized his metier and carried out his plan. And this gave him time and opportunity, and of both he made supreme use.

To an institution traditions are what character is to a man. The traditions of the University of Pennsylvania deeply impressed him. Morgan, Shippen, Kuhn, Rush, Caspar Wistar, were to him living personalities. His actual associates were such men as Agnew, Stillé, Leidy, Pepper and others whom we all know. The lives and characters of these men were not without influence upon the young Canadian, trained in the best way by association with men like Bovell. Howard and Ross, and familiar with the best methods and results of British and Continental Medicine.

Not less important was his connection with the College of Physicians, with its cherished traditions and magnificent library. Nor is the part played by the Pathological Society to be overlooked. Here he brought his best work, the result of long and keen study, illustrated by the findings in the post-mortem room at Blockley, and always met in large measure the sympathy and admiration of the younger men.

So from point to point during the five years he was with us, at the best period of his life, he found the stimulus of tradition, of opportunity and of appreciation.

What did he do for us? He made himself agreeable to the older men, and demonstrated to the younger men how medicine should be learned and taught. He broadened our conceptions in regard to the inductive method in medicine. Facts, facts—always the facts. The facts of the ward, of the microscope, of the laboratory, of the post-mortem room. He made it clear to some of the younger men who are now reaping the reward of their work, that it is not necessary for every man to be a practitioner in the ordinary sense, but that long years of hospital and laboratory work constitute a better equipment for the teacher and consultant. He inspired his students with enthusiasm for letters, and taught them the rare rewards that come of searching the medical scriptures. He showed that in the democracy of our profession any man is

free by a principle of self-selection, to attain the most coveted post of distinction and honor. He pointed out not only to us but to all men how fine and noble the profession of medicine is for those in it who are fine and noble.

He ornamented his discourse with quaint allusions to Holy Writ and "The Pilgrim's Progress," but did not in those days say much about Montaigne and the Religio Medici, and rarely alluded to Plato or Marcus Aurelius. Nevertheless, he helped some of us to do a little thinking.

At length, after the fashion of the nautilus, he builded a more stately mansion, and left us. We would have fain kept him. But that could not be. Without him the Department of Clinical Medicine at Johns Hopkins, mother of many teachers, might have been childless.

The Old World has given to the New many and great physicians. But these gifts have been returned not so much in number as in kind. The father of Brown-Sèquard was a Philadelphian. Marion Sims passed many years, and did much of his best work in London and Paris, and now to the list is added another imperishable name.

I asked a bit ago who ever heard of anyone leaving Boston. There is one famous case—a Boston boy who became the greatest American. There are points of resemblance between that great philosopher and this great physician. In both are manifest vigor of body and intellect, untiring energy, unflagging interest in things and men, manysided knowledge with the wisdom to use it, that quality known as personal magnetism and the gifts of leadership. Philadelphia is fortunate to have been the home of Franklin and the abiding-place of Osler.

There are many things I could say of Dr. Osler, were he not here, that I will not say in his presence. What we leave unsaid he must take for granted. When we are deeply moved we do not say the thing that is next our heart. We take refuge in commonplaces, in persiflage. It is an Anglo-Saxon—an American—trait. I speak not as a Philadelphian but as an American, when I say that it is a good thing for us that he came among us. Not only by precept but also by example has he been an uplifting influence in our professional life. How far-reaching that influence is this company attests. There are men here who have crossed a continent to break bread with him to-night. The source of that influence is to be sought not merely in his accomplishments as a physician, not in his learning, not in his wisdom, nor even in his well-balanced and buoyant temperament, but in that basic principle which all recognize but none can define, which for want of a descriptive name we call character. It is character that tells, and to character all things are added.

Now that he is going away we note that he has a trait that so

many of us lack—greatness in little things—method, system, punctuality, order, the economical use of time. These have been the handmaids to his greater gifts. These have enabled him to widen his usefulness to lands beyond the seas.

"Seest thou a man diligent in his business? He shall stand before kings."

Dr. Osler in Baltimore—Teacher and Consultant.—Dr. William H. Welch, of Baltimore, spoke to this toast. He said that it is always hazardous for contemporaries to attempt to pass judgment on those with whom they have been brought intimately in contact. It always seems worth while, however, that a generation should realize what it considers the value of the work of the men whom it most admires and the reasons for that admiration. It would, indeed, be a precious document if we could have some idea of how much the medical men of his generation thought of Sydenham, and if we could have some notion of the way in which they regarded his ideas, practical, scientific, and ethical. We are then making history for a future generation, and there is no doubt that the man who is being honored to-night exemplifies the highest ideal of the medical profession in his generation. When sixteen years ago Dr. Osler came to Baltimore, the main purpose of the faculty was that the hospital should be an integral part of the medical school, and that opportunities should be afforded for higher clinical training. It seemed for this purpose that students should be made a part of the machinery of the hospital, and it is to Osler that the working out of this part of the plan is due. This, indeed, represents his contribution to medical teaching here in America. He had stood out originally for a broader preliminary education, for the improvement of medicine than had been the custom before, though he had realized also that many of the men who had done well in the past had succeeded in doing so even with the drawback of defective education. When it is announced that only those holding college degrees would be admitted as students at Johns Hopkins Medical School, he said jokingly, "Dr. Welch, it is a fortunate thing that you and I come in as members of the faculty, otherwise we might not be able to secure admission to the school at all."

His most striking contribution to the life at Johns Hopkins has been the interest which he has aroused among the students and the personal influence which has enabled him to bring out in them the best of their intellectual and moral points. It is no wonder that his students love to call him Chief, for even the medical profession of the country has learned to have something of that strange feeling toward him, and he has done more than any other American medical man of our generation to bring harmony into our professional ranks. The spirit of friendly co-operation which characterizes the medical societies of to-day is due not a little to Osler's incentive and to his genial qualities. His personality was con-

stantly felt as that of a friend rather than a teacher, and his friendliness was marked by some delicious traits of humor. In Baltimore, he will be very much missed for this as well as for his great teaching qualities. No more will Dr. Thayer come home at one in the morning from some medical meeting to find the placard on his door announcing that he does medical practice for fifty per cent. less than any one else in the neighborhood, and when Dr. Opie comes to town, there will be nobody to tell the reporter of his distinguished athletic prowess, the many medals that he holds for athletic events. Many a joke has Osler played on the reporters, but they have more than repaid him in recent times, although it was all unconsciously.

Dr. Osler—The Author and Physician.—Dr. Abram Jacobi, of New York, spoke to this toast. He said :

Years ago, on some public occasions, the subject of to-night's onslaughts commended me for having passed six years of my post-graduate existence without writing, or rather publishing a single line, and seemed to congratulate those whom it might concern, upon my discreet literary behavior then and ever afterward. Him, however, I praise for having written and not ceased to write these several decades ; for him art has certainly been long, and opportunities he has not allowed to be fleeting. Indeed, the better part of an afternoon I have spent at the library of the New York Academy of Medicine in the pleasurable occupation of copying the titles of his books, and lectures, and addresses, and pamphlets, and papers.

But lo ! and behold my disappointment. Part of his books, of which there are, after all, only a dozen or thereabout, in fifty or more editions, he has not even produced himself. For you will admit, and he must confess, that it is only the first editions that should be credited to the author ; all the subsequent ones are due not to him, but to the greediness of the public. There are even those who pretend to know that he is no better than a tyro in publishing, in that he never had title pages ready for binding, after every fifty sales, with the inscription : "second thousand," "twentieth," or "ninetieth thousand."

Of cyclopedias and translations he kept going or aided in keeping going, I counted only fifteen ; his shortcomings, however, are most surprising in connection with his sterility compared with the rest of the world's journalistic output. We take in the New York Academy's library one thousand medical (excuse the word, it does not always fit) magazines : the affliction of the Surgeon-General's library is still more deplorable. Now imagine, there are many hundreds of them to which Dr. Osler never contributed so much as a line or as a "how do you do." Indeed, I could not mention the names of more than forty (British and German included) that can boast of his name on their indexes.

You see, therefore, that you have reason to be displeased with some shortcomings of the much-praised and much-loved man. For there are really a great many things he has not said—the James Jeffries of the perilous yellow variety of the press had to do it for him ; many things he has not done, many books he has not written and many addresses my "equanimity" is reluctantly forced to admit he has not delivered.

You all remember that your friend Horace, when you were young with him, said it was difficult not to write a satire. On the strength of that he found it easy to write as many as eighteen and cut right and left. Our criticism of our guest should, however, not be altogether adverse ; indeed there are six hundred here who are of the opinion that no encomium heaped on this friend of ours exaggerates his deserts. Still I know how to excel Horace, for though it be ever so difficult not to pronounce a eulogy, there will be no eulogy of mine here to-night.

I want our guest to feel comfortable among us. That is why I shall become as little personal as possible ; and as the occasion is propitious and you are bound not to interrupt me except on the strongest of provocations, I shall merely try to draw the picture of a medical man such as I have carried in my mind all my life as an ideal to be coveted, but never to be realized by any but the physician whom, provided he is at the same time a "philosopher," Plato calls "godlike."

Let us imagine a boy with a healthy body, a sturdy heart and an open mind, with as thorough a general, in part classical, education as the training of two decades will afford. His information is drawn both from books and through his trained senses. That young man's inclinations will be toward natural sciences, anatomy and biology ; in his clinical studies towards etiology. Perhaps he remembers from his Aristotle, that "whoever sees things grow from their origin will appreciate their nature and beauty," and is slow to stop before a problem that appears to be beyond solution. His clinical work as a student and a graduate will be carried on upon the same lines. In late years his hospital will continue to be a school to him, but at the same time a temple, at whose doors he will leave behind him selfish motives ; he will give the same time and attention to the poor that he bestows on those outside ; where he looks for knowledge he will do so without making the patient recognize that he is a means to an end ; he never forgets that the poor in a hospital, cut off from the world, has nobody to rely upon but his doctor ; and his soul goes out to those who suffer most. Indeed, let us of the hospitals not forget that. In that way two thousand years ago Christians were made, and nowadays socialists and philanthropists. Many of those who greet us with hungry looks are dying or going to die. Indeed, "*morituri nos salutant.*"

In his private relations he will prove what he is, a gentleman.

The Moliére period of wigs, and big talk, and sophistical bravado, the food of the credulous, has, or should have passed. Still, you know there is much credulity left amongst the well clad and well fed classes, whose education is limited to what their mental blinders, allow them to see, inside and outside Legislatures. There would be less of it if medical men would talk to the people less Greek and Latin after the fashion of an ill or overtrained nurse, and more common sense in an intelligible language. Indeed, it is easy to explain in simple words what we so clearly understand ourselves, even to a legislative committee solemnly considering the needs of the people. To that class of plain speaking osteo- and kinesipathy do not belong. That is why they mean nothing beyond ignorance and quackery.

While doctoring with therapeutics, remedial and other, our man will sustain his patient with words and looks coming from the heart, making no cheerless prognoses within hearing, and though his own temperament and foreboding be gloomy, not letting the patient suffer from that source. For, indeed, there are those who, like Osler's friend and companion, Thomas Brown, are of the opinion that "*mundus non tam diversorium quam nosocomium videtur, moriendi potius quam vivendi locus.*" The world is less a place of delectation than a hospital, more a spot to die than to live in. In consultations, before and after them, he cannot help being strictly ethical. While he recognizes his duties to the patient, he owes regard and respect to the colleague. The complaint you sometimes meet in the lay public, that there is too much etiquitte among doctors, is flimsy. I wish there were more of it. No patient was ever harmed by the attendant or consultant behaving like what they are, or should be, gentlemen. A consultation should be a pleasure, a lesson, and a support to the attending physician. What our friend practices himself he will teach his students in few words, but incessant examples. Perhaps he remembers his Seneca: "*Longum iter est per præcepta, breve et efficax per exempla.*" Precepts travel slowly, examples swiftly, by a short and efficacious cut. There was my good old Frederick Nasse; his kind looks and words, his gentle smile—they have all gone these fifty-four years, but are ever present to my mind. At the bed-side, in the quarters of the city poor, or in the wards, he was the friend of the sick, our friend, with the same kindliness, geniality and urbanity, that have since warmed my soul in the hospital wards of—Johns Hopkins.

As he instructs students, so he teaches his colleagues in the profession and in professorial chairs. In so doing he is always kind, but not always in *their* way. *Amicus Plato sed magis Amicus veritas.* He loves Plato, but what he loves more, is truth. As a member of medical societies he is active, no committee work is shunned, though a smaller man might do it, nobody is more energetic in filling the programme of an evening, nobody more conscious

of the good medical societies can do to themselves, their members and the public, and nobody more eager to disseminate his own convictions of their important functions.

This teaching, however, is not limited by the fences of his acre or his town. He is of the apostles who are told to travel and instruct and edify. He goes round about the village teaching. He is here and there, and everywhere, obeying the invitation of those who want to look into his eyes and listen to the spell of his voice. A thousand miles are to him like one. To him medicine is no private or narrow business; he is the statesman in medicine, which to him is not a trade, but a vocation and a religion.

I take the man I speak of to be an American, one of us. He looks about and finds it is not all that is good. Having spent his labor, time and genius, on improving his facilities, of teaching and learning, he may succeed to the extent of his own locality and school, but he cannot change what must be brought about by the slow progress of laborious and general evolution. When he says publicly and as often as he thinks it may do good, not that we have no great men nor efficient teachers, but that clinical facilities and methods of almost all our undergraduate schools are behind what they were in Europe fifty years ago, he is found fault with, perhaps ostracised. The least that is said against him is that he betrays our secrets to foreign lands. They forget that it is not he that betrays our conditions, it is our students, our young graduates who, by crowding into our own post-graduate and European clinics proclaim, as it were, from the housetops that they came to seek what they lacked at home. You must have noticed that the emigration to Europe of our laboratory students is no longer as numerous as it was years ago, but the search for clinical advantages has not abated. So if you meet a preacher in the desert, do not stone him. In ten years, or twenty, we shall admit he was right. Perhaps it may dawn upon some of us that what we took for invective, was the sensational lie of a penny-a-liner spy, and what our distrust mistook for a frown was the pity and sympathy of a humorist.

As he works for the future so he looks back into the past. A science, a profession is best understood when studied in its origin and gradual unfolding like the human organism, which is never comprehended except through the study of the embyro and the child. The history of medicine is to him, however, only a link in the chain of human events, one of the most important parts of universal culture, in which wars and kings are only upheavals and incidents. That is why it should be studied by the people at large as a part of their education. It will be understood when presented in a comprehensible form. You all remember the classical histories written by William Osler on the internal medicine, and by W. W. Keen on the surgery, and R. T. Chittenden on the

physiological chemistry of the nineteenth century, and published by the *Sun* four years ago. My medical ideal does much more. The loving connection between medicine and the world, between the profession and the public is not platonic, it is active. Being a conscientious citizen of the profession he feels his obligations as a citizen of the state and of human society. He will work for the consolidation of the profession, for the suppression of quackery and all other forms of infectious disease; for the improvement of our school system, our streets, our subways and water supplies, for the repeal of bad laws, and the introduction of good bills.

That is what your ideal medical man will do. Smaller men must be satisfied with performing only a share of it. But none of us here or elsewhere, has a right to shun common duties. Next to performing great tasks is for us who cannot reach the highest aims, the ambition to work in their service. Ideals are not reserved for those who walk on the mountain tops of human existence. No man or woman should be without a heart, nor without an ideal, and the sense of responsibility to the Commonwealth of which they form a part.

Doctor Osler! Have I involuntarily drawn some, or many, or most of the outlines of your picture, or have I not? I do not know, but I could not help while speaking, beholding you before my mind's eye. Still, being neither an orator nor a poet, nor a savant like yourself, I know my language cannot reach my aspirations nor your deserts. Do not explain, or excuse, or deny, either seriously or humorously. Your natural gifts you are not responsible for, so there is really no need of an apology. The life-long work you invested in your aims and ideals has ever been a labor of love and no hardship. You have not exerted yourself to earn thanks, and expect none. So when you enjoyed your incessant and fruitful toil, we have sympathized and profited. When you, fulfilling the obligations to science, the profession and the world, found inscribed in the innermost of your heart, added to the riches of mankind, we have admired and harvested. Your character and learning, your sound judgment and warm heart, your generosity and consistency have gained thousands of friends. Friends made by such as you are not of the every-day's stamp. There is nobody here or outside that came near you that has not been attracted, improved and inspired by you. These are simple statements in the plain every-day words of one who, being so much older in years than you, was glad to sit at your feet and listen to you, no matter whether you are heard in Montreal, Philadelphia, Baltimore or Oxford. As a sort of explanation of your intellectual growth and success, I have heard you speak of your indebtedness to favorable circumstances and to the influence of your descent. Be it so, for as your friend Thomas Brown, without, I believe, thinking of you, said three hundred years ago: *Non mediocris felicitatis est ad virtutem nasci.*"

(Sent. II, Par. II, p. 178 Merryweather—"it is no mean felicity to be born with the imprint of virtue." So your heirloom has actually become ours, indeed ; and we take pride in it almost like yourself. What your father and your good old mother, who are often on your lips, have done to shape you, they have done for us also. Tell her we send her greeting and the expression of our reverence and of our wish she may, as we do now and ever, enjoy her son long after this, her ninety-eighth year, and of our gratitude to her, the British mother of one of the greatest benefactors of the medical profession of America.

Presentation of "Cicero de Senectute."—Dr. S. Weir Mitchell, of Philadelphia, then presented Dr. Osler with a translation of Cicero's immortal essay on old age. Dr. Mitchell said that the gift undoubtedly fulfilled one quality of the true gift, inasmuch as it was something that the givers would like to keep themselves. As to the appropriateness of it there could be no doubt, and, indeed applause of the guests showed already that they realized its aptness to the occasion. One reason of this appropriateness is that Cicero must be regarded as an anticipatory plagiarist, since he had said in a famous passage of this essay, "It is very desirable for man to expire at the right time." As Cicero was probably about sixty years of age when he wrote this essay, he did not state as definitely as the newspapers claim the guest of the evening to have stated just what was the right time for a man to expire. As to his own selection as the presenter of the gift, Dr. Mitchell said he was the youngest man present, and was therefore naturally chosen to make the presentation, to the most venerable member of the American medical profession. It concerned a subject which the ladies never attained, and the translation had been made by James Logan, the friend and adviser of William Penn. The printing of this copy had been done by Benjamin Franklin, and it bears the date 1744. Franklin said very appropriately in the preface, that as it was only old men who would be apt to read an essay on old age, therefore the type selected had been especially large, in order that no straining of the eyes might remind them of how much the departing years were taking away from them. This was a story told by the kindly old pagan philosopher of the declining years, the declining years in the sense perhaps, that one is compelled to decline all the good things and yet find many subjects for consolation in the years as they go.

With a fervent "God bless you!" Dr. Mitchell made the presentation, and wished that Dr. Osler should find in the years as they passed only the renewal of the satisfaction that had been his in the friends and the influence for good of other days.

Dr. Tyson, in introducing Dr. Osler for the response to the toast, said that usually occasions like this and eulogies such as Dr Osler had listened to came to old men, and therefore had their

elements of sadness, inasmuch as they represented the farewell to the work of a lifetime. It is not the end of a career, however, that is celebrated to-night, but the entrance upon a new sphere of activity; and it is not "Good-bye" that is said, but a cordial "Auf wiedersehen," for it cannot be said that the medical profession of America shall not have the benefit of Osler's presence and of his genial oratory many times in the years to come.

Osler's Response.—Dr. Osler said that he could not but feel that the happiness which came to him in the midst of all these manifestations of friendship was undeserved. He felt that he had been singularly blessed in the friends that he had made. He would yield to no man who claimed to have more or better friends than he had, and for this he can say, "God be praised!" If success consists in getting what one wants, and being satisfied with it, then, indeed, success had been his, since friends so precious have come to him. Always, however, there has been the feeling of lack of desert of the privileges that have come. When the invitation to present himself as a candidate to the position of clinical medicine at Philadelphia reached him at Leipzic, Dr. Osler was inclined to think that it must be a joke. He was not sure with regard to it until two weeks later a cablegram reached him to meet Dr. Weir Mitchell in London. Boston measures men by brains, it is said New York by bawbees, and Philadelphia by breeding. It was Mitchell's task to test his breeding. He did so by having him eat cherry pies and noting how he disposed of the stones. As Osler disposed of them discreetly, the breeding question was settled. Friends had spoken during the evening of his influence on Philadelphia. What he felt as one of the most precious things in his life was the influence of Philadelphians on him who have been the colleagues of such great men as Pepper and Leidy and Agnew and Ashurst, was of itself a liberal education in medicine, a suggestive influence in medical education and in teaching, whose power could not be exaggerated.

At Johns Hopkins there had come the opportunity to do for America what had been so well done in Germany, to make a great teaching clinic. If he has accomplished anything, Dr. Osler feels it is by the introduction of Teutonic methods into American medical education. He cannot but feel supremely thankful then for the opportunity for this that was presented at Johns Hopkins.

American Hospital Opportunities.—Dr. Osler said that even on an occasion like this he felt that he must say a word with regard to the hospital opportunities that are being wasted in America. In every town of 50,000 inhabitants in this country, there could be a good medical clinic from which would be issuing regularly distinct contributions to medical progress. For this, however, there must be a change in hospital equipment and methods of appointment. If a few men guided the destinies of hospitals instead of

many, and if they were not too often the bone of political contention, then much might be accomplished that now failed. There would have to be properly paid assistants who would remain as resident physicians at the hospital, not for a year or two, but for many years. If this were done, then America would accomplish more for clinical medicine in five years than Germany could do in ten.

Dr. Osler himself has cherished three personal ideas: Do the day's work well, to act up to the Golden Rule and to cultivate equanimity. To do the day's work well may seem too practical to be an ideal, but it is an ideal. To let the future take care of itself, and to do the thing in hand as well as possible, represents the only hope for the successful accomplishment of good work. The Golden Rule is an ideal only if it is applied, not alone to the professional brethren, but also to patients and to all those with whom one comes in contact. As for equanimity, it is the only thing that insures anything like happiness in life. Equanimity that enables a man to take success with humility, to enjoy even his friends with humility, and to suffer sorrow and trial without being cast down.

Dr. Osler feels that he has made mistakes, that they have been of the head and not of the heart. He has loved no darkness, he has sophisticated no truth. He has allowed no fear to paralyse his efforts. He leaves his friends with sorrow and yet with feelings of profoundest joy over their manifestations of kindliness to him and his, and he feels that the bonds, though loosened, are not severed.—*Medical News.*

Clinical Department.

A Case of Tumour in the Third Ventricle. O. J. KAUFFMANN, M.D., in *British Medical Journal.*

J. R., aged 40 years, was admitted into the infirmary on September 24th, 1904. He was comatose, and breathing deeply and stertorously, but could draw up his arms and legs in response to peripheral stimulation. The left side of the face appeared rather flatter than the right, and it was thought that there was slight weakness of the left eyelids. Temperature, 101°; pulse, 88; respiration, 28. The condition remained practically unchanged for twelve hours, until about 8 a.m. next morning, September 25th. In that period he had several times passed urine and feces in bed. The temperature had gradually fallen to normal. At the hour named, consciousness began slowly to return, and by noon he had recovered snfficiently to make rational replies to questions of a simple nature, though he had still much confusion of thought, was inclined to yawn, and, if left undisturbed, quickly dropped off into quiet, natural sleep. He had no recollection of the seizure on the previous day, nor of having been brought to the Infirmary. Temperature, 98°; pulse, 72; respiration, 24. Urine normal. Knee-jerks equal and moderate; plantar reflexes equal in extent and rapidity, and both flexor. No trace of hemiparesis, hemianæsthesia, or hemianopia, and no speech-defect. The tongue was protruded mesially, and there was no trace of facial weakness, either during rest or an exertion of the muscles. The patient was completely blind in each eye from early infancy, the corneæ showing many opacities, rendering the pupils difficult of definition; they were, however, equal and rather small.

The history was as follows:—For twelve months before the apoplectic seizure above detailed, the patient had been continuously an inmate of the workhouse. Apparently there had been no reason to suspect any grave illness until September 24th, the day of his admission into the Infirmary. On that day he was noticed to vomit several times, but did not keep his bed. About 9 p.m. he was found unconscious and stertorous, and was transported to the Infirmary.

On September 30th, the patient having apparently regained his usual health, he was allowed to get up, and found his way about in his accustomed manner. Four days later, looking and feeling quite well, and presenting no vestige of paralysis, he was sent back to the workhouse. No definite diagnosis as to the cause of the apoplectic attack was made.

On October 25th, twenty-one days after his discharge, he was re-admitted in a semi-conscious state, and unable to reply to questions. He resisted handling, and the conjunctival reflexes were present. He vomited once, and threw his arms about restlessly. At 10.30 p.m. the coma had deepened, his face was flushed, and respiration stertorous; the temperature had risen to 104.6° Both plantar reflexes were brisk and extensor. An hour later he died.

It may be inferred that for about twelve months before his first admission the patient had enjoyed apparent good health. It is almost certain that during that period he had not suffered from vomiting or severe headache, for it is customary to transfer persons thus affected to the Infirmary without delay. The fundi of the eyes could not be examined owing to the corneal opacities.

Post-mortem Examination.—The body was remarkably well built and proportioned, and well nourished. The scalp rather hyperæmic, and the bones of the skull thicker than normal. The dura adhered extensively and strongly to the calvarium. The pia mater looked abnormally dry on the surface, and felt tacky, not smooth like the normal pia. The cerebral gyri were much flattened and the sulci narrowed, as from considerable intra-cerebral pressure. On cutting the infundibulum in removing the brain, a large gush of cerebral fluid occurred. Apart from the compression, the surface of the brain was healthy, and there was no meningitis. The optic. nerves, tracts, and chiasma were very thin, and of yellowish color.

Description of the Tumor.—The tumor, as large as a small hen's egg, roughly resembling the same in shape, and measuring two inches in length by one and a half inches in greatest breadth, occupied the greater part of the third ventricle, the cavity of which was considerably dilated by the growth. It had apparently originated in the choroid plexus of the third ventricle, and was completely encapsuled in the layers of the velum interpositum, which membrane appeared a little thin where it was stretched over the tumor, but showed no other morbid change. The choroid plexuses of the lateral ventricles were healthy. The veins of Galen were easily traced over the hinder part of the upper surface of the growth. Superficially to this ran the body of the fornix, much thinned, expanded, and softened by pressure. Pretty free rocking movement could be imparted to the tumor with its capsule, and it was held in position by this alone, being unconnected with any part of the brain structure. By gently shifting the growth, the three commissures could be seen, intact as to continuity, though lengthened by recession of the corpora striata and thalami. Behind the posterior pole of the tumor, the commissura habenularum appeared, looking quite normal. The pineal body had become adherent to the lower fold of the velum encapsulating the tumor. On cutting the velum laterally on each side, it became easy to turn back the

tumor, thus exposing the widened cavity of the third ventricle and infundibulum, and the flattened opposed surface of the basal ganglia. The pulvinar in each side was somewhat small and shrivelled—a condition associated, in all probability, rather with the atrophy of the optic tracts than with the intraventricular pressure The foramina of Monro were not recognizable.

When the brain was freshly opened, the growth having its upper part alone exposed, had very much the appearance of a fresh oyster, possessing the same greenish-grey tint, and apparently a very similar consistency. It was, in fact, so soft as to give the impression of a very slack cyst. But after hardening in formalin, it acquired a yellowish-pink color, and a firmly gelatinous consistency, with a tendency to gape on section. The cut section looked uniformly grey, with the exception of a few opaque white specks, widely scattered.

Microscopic examination was very little successful. Freshly cut frozen sections displayed the structure poorly ; and still less was made out from sections cut in paraffin after hardening in formalin. The growth consisted of small cells, roundish and oval, situated in a matrix, which later formed the greater part of the mass. There was a total absence of blood-vessels ; but many lacunæ were distributed through the matrix, looking like lymph channels ; their walls showed no special structure, and they gave the impression as having been merely hollowed out of the matrix. The tumor cells were granular, showing no nuclei, stained a diffuse pink with Von Giessen's stain, and showed no systematic grouping. The matrix was, to all appearance, structureless, and took a pale yellowish-pink color. Several other nuclear stains failed to show nuclei in the cells.

I regard the growth as being a degenerated sarcoma, probably most fittingly to be termed a myxo-sarcoma. For its duration no data are forthcoming, but it is certain that it had grown slowly, judging from the great enlargement of the third ventricle and the absence of symptoms.

Therapeutics.

Hemorrhoids.

According to T. C. Hill, in *Boston Medical and Surgical Journal*, it should be within the province of every general practitioner to treat successfully the more common rectal diseases, including hemorrhoids. Hemorrhoids may be classified, according to Hill, into external and internal, and of the former the most common forms are the thrombotic and the external connective tissue hemorrhoid. The thrombotic form is an extravasation of blood at the margin beneath the skin covering the external sphincter. It is a very painful condition, which usually lasts for two or three days, or until the clot has been absorbed and the pressure relieved on the nerves supplying the parts. They are usually caused by straining at stool, lifting, or by paroxysms of coughing. The treatment of this condition is simple and effective by first injecting, with a sharp-pointed needle, a 1 per cent. solution of eucain as follows: With the left index finger and thumb grasp the peri-anal skin near the tumor and pinch for a moment to render the part numb, and then insert the needle very superficially just under the skin, slowly injecting the whole of the top of the tumor. Then with a curved bistoury transfix the base of the swelling and cut outward, and if necessary use a curette to remove the clot and pack firmly with a strip of iodoform gauze and allow it to remain for twenty-four hours to prevent the formation of another clot. This procedure, Hill says, is always successful.

The "connective tissue hemorrhoid" is made up of redundant folds of peri-anal and anal skin, caused by stretching this region by large hard fecal masses. A slight laceration is produced and a mild infection takes place. In the treatment of this form, when the external sphincter is acutely inflamed, but not hypertrophied, a palliative course of treatment is recommended. Constipation must be relieved. After bathing the parts with warm water and drying, he advises those procedures recommended by Goodsall and Miles, of London, of removing all adherent secretions and previous ointments, wiping the anal region with olive oil on cotton wool and then apply the following ointment:

℞ Zinci oxidi ..... ℥ii
Linimenti camphoræ ..... ℥ss
Lanolini ..... ℥i

M. Ft. unguentum. Sig.: To be applied locally at night, and during the day dust the parts with the following powder:

℞ Zinci oxidi ..... ℥ss
Pulv. camphoræ ..... ℥ii
Pulv. amyli ..... ℥x

M. Ft. pulvis. Sig: To be applied locally during the day.

After the acute symptoms have subsided remove by excision, first anesthetizing with the eucain solution and excising the hemorrhoid with curved scissors and allow it to heal by granulations, or, if the base is too broad, the wound may be united with catgut sutures. Only two or three folds should be removed at one time, in order to avoid contraction of the anus. As to internal hemorrhoids where the patients complain of bleeding and protrusion takes place, operation is recommended in all cases. The author favors the injection method in skilled hands in such cases. He proceeds as follows: Empty the bowel by means of a saline cathartic and a large enema of soap and water; render the parts aseptic by means of a bichlorid solution and slowly inject the following:

℞. Acidi carbol.....ʒii
Acidi salicylici.....ʒss
Sodii biboratis.....ʒi
Glycerini (sterile) q. s. ad.....ʒi

M. Sig.: Inject six to twelve drops slowly.

After the injection the hemorrhoids should be replaced within the bowel and a suppository containing one grain (.06) of pulverized opium inserted and a T bandage applied with moderate pressure over the anus. The bowels should be moved with cascara on the second night and daily thereafter.

While the writer does not believe in the exclusive use of this method, he is of the opinion that in properly selected cases where the external sphincter is somewhat relaxed, or can be dilated without much discomfort to the patient, perfect results may be obtained. But where the hemorrhoids are not large or are over three in number they may preferably be treated radically by ligature method.

Gant, in *New York Medical Journal*, states that the non-operative treatment of hemorrhoids consists in placing the patient in bed in a recumbent position, restricting the diet to liquids and semi-solids, giving laxatives and applying the ice bag and astringent remedies to reduce the swelling and inflammation. If strangulation is present with pain and spasm of the sphincter hot water compresses should be applied and suppositories containing morphin, gr. ¼ (.015), each inserted as necessary. If hemorrhage is present a small plug of gauze, about the size of the little finger and three inches long, should be inserted, moistened in a 2 per cent. silver nitrate solution or a 10 per cent. ichthyol or 50 per cent. balsam of Peru. But he is of the opinion that non-operative treatment is only palliative and must be followed sooner or later by operation. The operations most frequently employed are: 1, the clamp and cautery; 2, ligature; 3, excision; 4, injection.

This author prefers the clamp and cautery or the ligature methods. In uncomplicated cases he prefers the office treatment, and he has discarded cocain and eucain, and operates under local anesthesia by distending the tissues with sterile water.—*J. A. M. A.*

Physician's Library.

International Climics. Volume I, XV. Series, 1905. Edited by A. J. O. KELLY, M.D., with the collaboration of leading members of the medical profession throughout the world. Price per volume, $2.00. Issued quarterly. Philadelphia: J. B. Lippincott & Co.

The present volume of this fine series of clinical reports and advances in medicine, is before us, and is one of the best, if not the best, it has been our privilege to examine. An especially valuable feature of this volume is the department devoted to the progress of medicine during 1904, which is clear, concise, and covers the entire ground. Anyone who desires to keep abreast of the progress in the various branches of medicine will appreciate this department, as they will profit by it. It is a pleasure to endorse such a good work as the "International Clinics."

Diseases of Metabolism and Nutrition. Part VI. Drink Restriction (Thirst Cures), particularly in obesity. By PROF. CARL VON NOORDEN and Dr. HUGO SALMON. Authorized American Edition. Translated under the direction of Boardman Reed, M.D., Philadelphia.

This number of the series of monographs or clinical treatises on the pathology and therapy of disorders of metabolism is a small 8vo. 86-page cloth book of price 75 cents. It is published by E. B. Treat & Co., New York, and is an interesting, as it is an instructive pronouncement of the highest practical importance. Prof. Von Noorden proves that a great many drink too much, to the infinite danger of heart, stomach and kidneys. The monograph will well repay all who wish to get it.

The International Medical Annual: A Year Book of Treatment and Practitioners' Index for 1905. Twenty-third year. Price $3.00. E. B. Treat & Co., 241-243 West 23rd Street.

No one who desires to keep in touch with the advances made in the profession of medicine each year, can afford to neglect providing himself with a copy of this book. Necessity has forced the publishers to issue the Annual in larger form, and we think this will meet with the approval of the profession. This volume is well illustrated.

Merck's 1905 Manual of the Materia Medica, is a ready-reference pocket book for the physician and surgeon. It is a veritable store-room of useful information.

Conservative Gynecology and Electro-Therapeutics. A practical Treatise on the Diseases of Women and Their Treatment by Electricity. By G. BETTON MASSEY, M.D., attending surgeon to the American Oncologic Hospital, Philadelphia; Fellow and Ex-President of the American Electro-Therapeutic Association; Member of the Société Française d'Electro-Thérapie, American Medical Association, etc. Fourth Edition, Revised, Rewritten and Greatly Enlarged. Illustrated with Twelve (12) Original, Full-Page Chromo-lithographic Plates; Twelve (12) Full-Page Half-tone Plates of Photographs taken from Nature, and 157 Half-tone and Photo-Engravings in the Text. Pages xvi-468. Royal Octava. Extra Cloth. Beveled Edges. Price, $4.00, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

Within recent years the advances in electro-therapeutics have been very great, and many general practitioners are employing electricity far more than formerly. As electricity has proven itself a therapeutic agent of considerable value in gynecology, the revising of this well-known work is timely. It is beautifully illustrated and can be recommended. There are four entirely new chapters on the treatment of cancer alone.

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A Text-Book of Materia Medica: Including Laboratory Exercises in the Histologic and Chemic Examinations of Drugs. For Pharmaceutic and Medical Schools, and for Home Study. By ROBERT A. HATCHER, Ph.G., M.D., Instructor in Pharmacology in Cornell University Medical School of New York City; and TORALD SOLLMANN, M.D., Assistant Professor in Pharmacology and Materia Medica in the Medical Department of the Western Reserve University of Cleveland. 12 mo volume of about 400 pages. Illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Flexible leather, $2.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

Students of medicine, as well as pharmacy students, will undoubtedly welcome this work. The authors are teachers of much experience, and in this forelying book present a work on the subject of materia medica in an entirely new way, teaching by actual experimental demonstration. Part I. comprises a guide to the study of crude drugs, both official and unofficial; while in Parts II. and III. the histologic and chemic examinations of drugs are considered in a scientific, yet clear and simple manner. All the histologic descriptions are supplemented by laboratory exercises of important drugs, so that the student becomes insensibly acquainted with their construction. Throughout the entire work general stress is laid on the recognition of adulterations. We can strongly recommend this work as reliable, practical and excellent in every way.

Studies in the Psychology of Sex—Sexual Selection in Man. I. Touch. II. Smell. III. Hearing. IV. Vision. By HAVELOCK ELLIS. 6⅜ x 8⅞ inches. Pages xii-270. Extra Cloth, $2.00, net. Sold only by subscription to Physicians, Lawyers and Scientists. F. A. Davis Company, Publishers 1914-16 Cherry Street, Philadelphia.

This volume gives evidence of painstaking, scientific observation on the part of the author, who follows up his subject with the keen scent of the true researcher after scientific truths. Histories of several cases are given in detail. These books will stand as authorities on the subject; are to be complete in five numbers, and it is the only English edition sanctioned by Mr. Ellis.

The Ophthalmic Year-Book. A Digest of the Literature of Ophthalmology with Index of Publications for the year 1903. By EDWARD JACKSON, A.M., M.D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic, with forty-five illustrations. The Herrick Book and Stationery Co., Denver, Col.

The contents of this book contain digests of current literature on Refraction, Accomodation, Ocular Movements, Diseases of the Conjunctiva, Diseases of the Cornea, Diseases of the Sclera, The Pupil, Vocal Tract, Retina, Optic Nerve, Crystalline Lens, Vitreous, and also on Toxic Amblyopias, Glaucoma, the Bacterial apparatus, Diseases of the Lids, the Orbit, Tumors, Injuries, Sympathetic Diseases, and chapters on general Ophthalmology and general operative measures. In addition there are lists of books and Journal articles on the subject for 1903.

A Text-Book of Diseases of Women. By CHARLES B. PENROSE, M.D., Ph.D., formerly Professor of Gynecology in the University of Pennsylvania. Fifth Edition, Thoroughly Revised. Octavo volume of 539 pages, with 221 fine original illustrations. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Cloth, $3.75 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

With astonishing regularity a new edition of this excellent text-book is called for, and it appears to be in as great favor with physicians as with students. Indeed, this book has taken its place as the ideal work for the general practitioner. The author presents the best teaching of modern gynecology, untrammelled by antiquated ideas and methods. In most instances only one plan of treatment is described.

The new edition has been carefully revised, much new matter has been added, and a number of new original illustrations have been introduced. In its revised form this volume continues to be an admirable exposition of modern gynecology.

A Hand-Book of Surgery. For Students and Practitioners. By FREDERIC R. GRIFFITH, M.D., Surgeon to the Bellevue Dispensary, New York City; Assistant Surgeon at the New York Polyclinic School and Hospital 12mo volume of 579 pages, containing 417 illustrations. Philadelphia, New York, London: W. B. SAUNDERS & Co. 1904. Flexible leather, $2.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

Dr. Griffith has given us a little work of great merit. It is a brief outline of the principles and practice of surgery, written as concisely, as is possible, with clearness. We are sure it will be valuable alike to the student and the practitioner, because the entire subject of surgery is covered, including all the specialties, as Diseases of the Eye, Ear, Nose and Throat; Genito-Urinary Diseases; Diseases of Women, etc. There are also articles on Life Insurance, Rape, Sexual Perversions, Microscopy, and on many other subjects of great importance to the practising surgeon. There are 417 illustrations, selected for their clearness, accuracy, and general usefulness. We predict that Dr. Griffith's work will be to Surgery what Dr. Stevens' Manual is to Medicine.

A Text Book of Obstetrics. By ADAM H. WRIGHT. Professor of Obstetrics, University of Toronto, Obstetrician and Gynecologist to the General Hospital, Toronto, Canada. With two hundred and twenty-four illustrations in the text. Price, $4.50. New York and London: D. Appleton & Co. Canadian Agents: Geo. N. Morang & Co.

The essentially practical character of this book is its leading feature, and will consequently appeal to both student and practitioner. Wright's obstetrics will assuredly take first place with Canadian students hereafter as a text-book, and will be sure to meet, from its clear, concise and authoritative style, with a warm reception at the hands of those attending United States colleges. Its publication marks a distinct epoch in Canadiam medical life—authorship in Canadian medicine—and Dr. Wright is to be heartily congratulated upon his work. As a teacher of obstetrics for the past seventeen years, those who have passed under his tuition, will welcome this product of his knowledge and experience. The illustrations are splendid, probably the best which ever adorned any text-book on obstetrics, many of them being original.

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COMMENT FROM MONTH TO MONTH.

As we have already announced, the thirty-eighth annual meeting of the Canadian Medical Association will take place this year in Halifax, under the presidency of Dr. John Stewart of that city, who, along with his Executive Committee and Programme and Committee of Arrangements, is ardently working for the complete success of this meeting, the first which has been held in Halifax since 1881, when the number present just numbered fifty-three. If a united effort be put forth by the vice-presidents and local secretaries in the different provinces, especially in Nova Scotia, Prince Edward Island, New Brunswick, Quebec and Ontario, there should be a largely attended meeting. There are indications that Montreal and Toronto are both going to send down good contingents. Daily there are additions to the list of contributors, whose names we will publish in a later issue. This year all delegates will travel on the usual STANDARD CONVENTION CERTIFICATE plan, which means that every delegate, when purchasing single first-class fare to Halifax, must get from the ticket agent a standard convention certificate for himself, his wife, or daughters, if they accompany him. Delegates will kindly bear in mind that they do not have

to get any special certificate from the General Secretary. If fifty are present holding STANDARD CONVENTION CERTIFICATES, all will be returned free to Montreal. Montrealers will, as well as delegates from Quebec, be returned for single fare. If there are three hundred present holding these STANDARD CONVENTION CERTIFICATES, all will be returned free to their original starting point. This applies to all parts of Ontario, Manitoba, the North-West Territories and British Columbia. Delegates from points west of Port Arthur will not be allowed to use the upper lake routes when travelling by this certificate plan in either direction. In all cases return transportation *must* be arranged for at Halifax. The usual time limit for conventions will be allowed for points east of Port Arthur, namely, three days before and three days after the meeting. Our readers will kindly extend this information as much as possible, and those who intend contributing papers and being present are requested to notify the General Secretary, Dr. George Elliott, 203 Beverley Street, Toronto, without delay. No arrangements can be secured for return *via* Boston or New York after the meeting ; and those desiring to be routed thus should ask for tourists' tickets. Arrangements are in force, by Standard Certificate Plan, for boat trip from Toronto or Kingston to Montreal or Quebec *via* the Richelieu and Ontario Navigation Company's line.

There has recently been revived, through the medium of the public press, a rumor which gained some attention four or five years ago, to the effect that several influential medical men of Toronto were seeking to have established a medical department in connection with McMaster University. Just how far matters have gone in this direction we do not know, but at a time when the scheme of amalgamation between the University of Toronto and Trinity University medical faculties is working satisfactorily and being perfected from month to month, and when Toronto's great rival in Canada, McGill, is extending and taking in the medical faculty of Bishop's College University, the present time would seem to be most inopportune for any attempt to re-establish rival medical interests in this city. Nor is the reason for so doing quite plain, unless it be that the proposal for a new university hospital has excited the ambitions of would-be teachers. Anyway, the next five years will be a most important period in the history of the medical life of this city. In that time we ought to see completed the new General Hospital, and hospital construction and extension will be a theme uppermost in the minds and conversation of the medical fraternity. It will be a subject which will require the most careful thought and consideration and will require to be dealt with by the

ablest men of the profession as well as by the ablest men in University administration. Of the six hospitals in the city where facilities can be afforded for clinical instruction, three already admit students to walk their wards. Of the others, we believe that one at any rate is prepared to provide for clinical instruction, and the scheme has already been advanced in some medical quarters that it would be well for all if a hospital trust were to administer the affairs of all, and that some of the members of the staffs of these, where they are considered qualified, be added to the clinical department of the medical faculty of the University. This is rather a large scheme, and very few would care to grapple with it. On the other hand, if it be proposed to have a hospital solely and alone for the University and its medical students, a body which will probably average between six and seven hundred students per annum, it is questionable if it would be able to provide sufficient clinical material for the requirements of such a number.

The Toronto Clinical Society is bringing to the attention of the Ontario Government the desirability of establishing mental wards in general hospitals. It may not be generally known that this step has been tried in the Albany, N.Y., Hospital, and has proven successful, so successful, in fact, that the Association of Hospital Superintendents of the United States and Canada has the matter under discussion. What are the reasons for seeking the establishment of these mental wards? First, in all asylums there are instances of transient accommodation ; second, there are patients who require this transient accommodation before commitment to a State asylum, and they should have it in a hospital ; third, there are mild cases of insanity which could recover in a hospital ; fourth, victims of drugs require such wards ; fifth, then there are rapidly developing cases of delirium and dangerous forms of mental disorders following surgical operations and anesthesia. Surely these are sufficient reasons to establish such wards in connection with general hospitals. There is one point in connection with this coming procedure in hospital administration, and that is that if these wards be established their construction must be carried out in a separate pavilion, and disregard of this essential architectural feature will practically destroy the efficacy of its establishment. It will prove interesting to here record the operations of this mental ward in the Albany Hospital for the first two years when it was in its experimental stage, that is, up to February 29th, 1904. There were treated 331 patients, of whom 110 recovered, 96 improved, 88 unimproved, 25 dying, and leaving 14 under treatment. In these cases all forms of mental disorder were represented.

A correspondent has written us asking us to urge upon the attention of the Medical Council of Ontario at its coming annual session the desirability of conducting examinations for the Ontario College of Physicians and Surgeons at London in addition to conducting them at Toronto and Kingston. Whether any good end would be served by advocating the holding of examinations at London for the benefit of those students being graduated from the Western University we do not know other than saving to the students at London the necessary expense involved in coming to Toronto, which is not great. No doubt examinations could be conducted at London without any great amount of outlay on the part of the Medical Council, and probably London, being the seat of a Medical Institution, has as much right to the distinction as Kingston.

By the death of Dr. James Thorburn, which took place at his residence in this city, after an illness of two weeks, on the 26th of May, the Canadian medical profession loses a distinguished member. Dr. Thorburn during the active practice of his profession enjoyed an extensive and lucrative practice, had been surgeon to the Grand Trunk Railway, Professor of Materia Medica and Therapeutics at the University of Toronto, President of the Ontario Medical Council, President of the Canadian Medical Association, and Medical Director of the North American Life Assurance Company. He was a fine type of the family physician of days gone by, and had reached to a good age as it goes in the medical profession, namely, seventy-five years. Dr. J. D. Thorburn, the well-known specialist of diseases of the nose and throat, was a son, and Dr. Bruce L. Riordan, Grand Trunk Railway Surgeon at Toronto and well known all over Canada, was a son-in-law. The funeral, which, in spite of a drenching downpour, brought out a large number of the profession from the city and prominent citizens, was held on the afternoon of the 29th of May. Dr. J. Alexander Hutchison, senior Grand Trunk Railway Surgeon, was present from Montreal.

Editorial Notes.

London Correspondence.—A great wave of what may perhaps be called alcoholic intemperance is sweeping over the medical profession in this country. A few weeks ago a conference was held at which the use of alcohol in any form and for any purpose was condemned by Sir Victor Horsley with an ultra-vigor vigor ; his denunciations were re-echoed by Sir William Broadbent and other high priests of the medical synagogue. Now, Sir Frederick Treves, evidently feeling it due to himself not to be outdone in this direction, has pronounced a curse almost as strong and as sweeping as that of Ernulphus, which the curious may find in that improving work, " Tristram Shandy." Speaking at a meeting of the Church of England Temperance Society the other day, he declared that alcohol is distinctly a poison, the use of which should be regulated just as strictly as that of any other poison. It is, moreover, an insidious poison, producing effects for which the only antidote seemed to be alcohol itself. It is not an appetizer, and even in small doses it hinders digestion. It profoundly modifies the nutrition of the body with the results that drunkards are ill-nourished. Its stimulating effect only lasts a moment, and after it has passed off the capacity for work falls enormously. It brings up the reserve forces of the body and throws them into action, with the result that when they are used up there is nothing to fall back upon. It may be remembered that Treves was for two or three months in South Africa, and his testimony is that on the march to Ladysmith the soldiers who were drinkers fell out as though they were labelled. Dealing with the action of alcohol on nerve centres, he said the use of alcohol is inconsistent with surgical work or with any work requiring quick, keen, and alert judgment. He said that the use of alcohol is emphatically diminishing in hospital practice and among the professional men who work hard during the day. The idea that a young healthy person wanted alcohol he pronounced to be preposterous ; they might as well want morphine or strychnine. He concluded by saying, that having spent the greater part of his life in the operating room, he could state that there were some persons he did not mind operating upon and others that he did, but the person whom of all others he dreaded to see enter the operating theatre was the drunkard. About the same time, at a meeting of the Women's Total Abstinence Union, Mr. Vickerman H. Rutherford denounced alcohol as a great factor in national inefficiency, and he expressed a wish that doctors would cease to play down to public ignorance by prescribing alcohol in any form. A week or two ago there was a conference of physicians at

Leicester, to hear an address by Dr. G. Sims Woodhead, Professor of Pathology at Cambridge. There, too, alcohol was denounced as the root of all evil, physical and moral, and one practioner after another rose to express his agreement with the learned lecturer. It is all right enough, but it would be a good deal more edifying if the doctors followed their own virtuous precepts a trifle more strictly. When a physician who has been eloquent in prescribing alcohol as an unclean thing goes straight to the nearest bar and ask for an *apéritif*, which he follows up with a dinner where champagne and other wines flow freely, and even the deadly liquor is absorbed without apparent scruple or repugnance, one may perhaps be forgiven for not taking very seriously professions made on public platforms. It is the fashion just now to condemn alcohol, and even sensible men have to follow the lead of the fanatics. The difference between precept and practice is well illustrated by a story told of the late Sir Andrew Clark. Very likely your readers have heard it before, but it will bear repetition. Sir Andrew was an ardent apostle of temperance, and as he had a command of unctuous verbosity almost as great as Gladstone's, he was naturally much in request at teetotal meetings. A country doctor one day brought him a leash of patients for consultation, and the lion was so pleased with the proceeds of the morning's hunting that he asked the yokel to stay to luncheon and then accompanying him to a meeting where he was to dicourse on the evils of drink. The country practitioner was greatly impressed by what he heard, and expressed his approval in terms so flattering that the orator asked him to go home and dine with him. At dinner the guest was not a little surprised to be asked by the denouncer of alcohol to join him in a bottle of champagne. Another followed, and perhaps a third. At any rate the great man unbent so much that the little man ventured to hint at the inconsistency between his teaching and his practice. Whereupon the famous physician delivered himself to the following effect: "My dear fellow, I have a vast correspondence which I cannot possibly attend to till after dinner. I am then so tired that I cannot deal with it unless I have some champagne—and when I have had some champagne, I don't care whether I deal with it or not!"—*The Medical News.*

The Nature of the Silver Reaction in Animal and Vegetable Tissues. As a reagent in histology silver nitrate has been of the utmost service in elucidating the structure of certain tissues. The nature of the selective action of this reagent, however, has so far not been cleared up, although a great number of investigations have been made as to what the compound is that is formed and as to the changes which take place on its

exposure to light. Some observers have maintained that the silver compound is a mixture of a chloride and an albuminate, both of which become colored when exposed to the light, while others have assumed the presence of an albuminate compound only. The point is that when a silver salt is added to a solution of one of certain organic compounds and the mixture is exposed to light a more or less colored product soon appears, the formation of which is regarded to be due to reduction. The question has been very thoroughly studied by Dr. A. B. Macallum, professor of physiology in the University of Toronto, and his conclusions, which are embodied in a paper recently read before the Royal Society, seem convincing as to what really takes place when a silver salt reacts with tissues. Professor Macallum started his investigation under the impression that the reaction of proteids with nitrate of silver in sunlight is due to the presence of chlorides only, in which case it is obvious that if proteids could be thoroughly freed from chloride the former would give no reduction compound with the silver salt. He therefore proceeded to prepare proteid absolutely free from chlorides and to subject the product to the action of silver nitrate under the influence of sunlight. He found that the egg albumins and the serum albumins and globulins, which had been carefully treated with a view of eliminating haloid salts, did not yield any reaction whatever with the silver nitrate reagent, even after weeks of exposure to bright sunlight, although the original unpurified material in every case gave an intense reduction effect. Similarly, the gelatin of commerce gave an intense reaction with the silver reagent in sunlight, but on the elimination of the haloid salt—that is, chloride—no reaction with silver nitrate, after remaining two weeks in sunlight, was obtained. Even crude preparations of commerce gave no change after being purified from chlorides in the way indicated. Similar results were obtained with vegetable proteids. From this investigation it seems clear that the reaction which animal and vegetable tissues give with nitrate of silver may be attributed to halogens in haloid form and possibly to taurine and creatine, and that proteids and gelatin do not when freed from traces of haloid give the slightest color reaction with the reagent. As to taurine and creatine, these occur in animal tissues in such inappreciable quantity as probably to be outside consideration. The result is that by appropriate selection of tissues of animal and vegetable forms for treatment with the reagent it is possible to determine with a considerable amount of certainty and a very great degree of accuracy the distribution of chlorides and perhaps also of other haloids in various cytological elements. Professor Macallum is pursuing this very interesting inquiry, and already he announces two highly-important results—namely, that intercellular material and structures, including the so-called cement substance of Von Recklinghausen, are rich in chlorides, and that normal nuclei of

animal and vegetable cells are absolutely free from them. The experiments incidentally have a bearing upon the action taking place on the sensitised photographic plate.—*The Lancet.*

University of Toronto.—Department of Hygiene. By the erection of the new Medical College Building of the University of Toronto, greatly increased accommodation has been provided for the Museum of Hygiene, and for the reception of additions to the collection.

This circular is therefore addressed to engineers, architects, builders, plumbers, manufacturers of household appliances, foods and clothing fabrics, and to other persons interested in sanitary and domestic science, with the object of increasing the collection of such articles, including samples and models, as may be of interest from a sanitary point of view. In addition to new and ideal appliances, old specimens of plumbing, water pipes, etc., illustrating defects leading to insanitary conditions, will be welcomed.

It is requested that, when contributions are likely to involve much expense in carriage, fitting up, etc.. particulars regarding the same be furnished, and a reply awaited before they are forwarded.

All articles accepted will be placed on exhibition, with the names and addresses of the donors attached.

Contributions and communications may be addressed to Dr. Wm. Oldright, Professor of Hygiene, Medical Department, University of Toronto, February 24th, 1905.

The Banquet to Dr. Osler. Although Dr. Osler did all of his public work in this country while a Professor in Philadelphia and Baltimore, a great dinner was given to him in New York on the second of May, just before his proposed departure to England, to enter upon his duties as Regius Professor of Medicine in the University of Oxford. The giving of the dinner in our city was a tacit recognition that the Medical Centre of the United States of America is on this Island, and this we believe every judicial medical mind will admit. The guests were about five hundred in number, and as far as we have been able to see from the list they were exclusively physicians, from Baltimore, Philadelphia, Boston, the Province of Ontario and New York. This was perhaps the largest dinner ever given to a Professor of Medicine in this country, perhaps in any other country. Dr. Osler was most heartily received by his friends, for all there were his friends. An exceedingly lucid and interesting anlaysis of the qualities which had led

to his success were given by the presiding officer, Professor Tyson, of Philadelphia, by Professor Shepherd, of Montreal, Professor Wilson. of Philadelphia, Professor Welch, of Baltimore, and Professor Jacobi, of New York.

Professor Shepherd gave a very interesting picture of Dr. Osler's life as a student, as a man chiefly concerned in acquiring knowledge and not simply getting ready for examinations. He gave a sketch of his Post-Graduate study in Europe, and he considered that although Professor Osler was not a teacher in Montreal for a long period, that he made a very marked impression and somewhat guided the work there, even up to the present time. Just so Dr. Wilson, in a very charming portraiture of Dr. Osler's medical career in Philadelphia, indicated that Philadelphia felt the impress of his enthusiastic teaching in all their medical circles. Dr. Wilson remarked that scarcely anyone had ever left Boston except Benjamin Franklin, and he classed Franklin and Osler together as men of somewhat of the same attributes. Dr. Welch's jolly and interesting introduction enlivened the large gathering to the highest point. It is said that Welch, Halstead, Kelly and Osler are to be painted by Sargent in London, as a group of the Professors of Johns Hopkins. The presentation of "Cicero de Senectute," by Dr. Weir Mitchell, was of the highest interest. Dr. Mitchell was most cordially received, as in his semi-humorous vein he delineated the qualities of the host. Of Dr. Osler's address it is hard to speak in such space as we have for this most interesting occasion. He spoke of his own personal ideals:

"I have three personal ideals. First, to do to-day's work well and let to-morrow take care of itself. I owe any small success I may have attained to that above any other. Second, to act the Golden Rule toward my professional brethren and my patients. Third, to cultivate a certain measure of equanimity, to meet success with equanimity, to meet grief, pain, anguish and suffering with equanimity befitting a man.

"I shall not worry so long as I carry the memory of the past you have given me. My mistakes have been of the head, not of the heart. I have loved no darkness, sophisticated no truth, nursed no delusion and showed no fear."

Dr. Osler said that Dr. Weir Mitchell and Mrs. Mitchell were the cause of his coming to Philadelphia, and the great novelist and neurologist insisted to Dr. Osler that the breeding of any man appointed to a Chair in Philadelphia was most important. "Give him cherry pie and see how he disposed of the stones, and that would tell whether he was fit to remain a Professor in Philadelphia," he said. "I ate cherry pie and disposed of the stones discretely and so I got the chair." The dinner was also enlivened by a song composed and sung by the *Saint* Johns Hopkins Gastric

Quartette, at the dinner to Dr. Osler, at the Walled-off Castoria, New York, May 2, 1905.

"Look at his arteries,
Judge of his age by these,
Scarce thirty-five.
May he ne'er pass his prime
In symptom or in sign,
Younger in spite of time,
Long live our chief.

CHORUS: God save the mighty chief,
We part from him in grief,
God save our chief.
God save our Regius Prof.,
Our hats to him we doff,
God save our Regius Prof.,
God save our Prof.,

—*The Post-Graauate.*

A LETTER FROM HOME.

Dear Jim: The crops is doing well,
The calf is big enough to sell;
I've traded off the brindle cow,
And we ain't got but one just now.
The hosses all is fat and sleek,
Except that Bob is ruther weak,
But that ain't nothing very queer;
We've had him nigh on twenty year.
I think I'll put the bottom field
In corn and oats; it oughter yield
A heavy crop; the land is rich,
And just the thing for oats and sich.
There ain't no news to speak of, Jim;
Miss Susie Jones is just as trim
As when you saw her in the fall.
The folks is well; I guess that's all—
But stop! I 'most forgot 'bout dad.
I 'xpect the news'll make you sad.
You know that dad was getting old;
Just sixty years had o'er him rolled,
And so, I must regret to say,
We chloroformed poor dad to-day.
And that is all the news until
I write again.

Your brother,
BILL,

—*Maryland Med. Jour.*

News Items.

CANADIAN.

DR. SLATER, of Emmerson, Man., has moved to Winnipeg.

DR. GORDON F. JACKSON, of Ottawa, has decided to locate in Norwood.

DR. WALTON, Winnipeg, has commenced practice in Snowflake, Man.

DR. CHAS. F. MARTIN has returned to Montreal from Washington, D.C.

DR. HARRINGTON has returned to Dauphin, Man., from a trip to California.

CHATHAM, N.B., is once more clear of smallpox. There were in all sixty cases.

DR. W. A. YOUNG, Toronto, has returned from Atlantic City and Philadelphia.

DR. MORROW, of Arthur, has been appointed a coroner for the County of Wellington.

DR. BURNS WALKER, Niagara Falls, has gone to Orillia to practise with Dr. Gilchrist.

ONE hundred and fifty-six children were admitted to the Montreal Baby Hospital during 1904.

THE question of a Medical Faculty in connection with McMaster University, Toronto, is being revived.

DR. W. D. BRYDONE JACK, Vancouver, B.C., has been in New York and other eastern cities for some weeks.

DR. W. O. CLARK, Winnipeg, has been appointed Medical Superintendent of St. Boniface Hospital in that city.

A NEW hospital is to be erected at Moosomin, N.W.T., to accommodate twenty patients. The cost will be $8,000.

DR W. F. BABB, of London, formerly of Fullarton, has entered into partnership with Dr. J. McWilliam, of Thamesford.

DR. CRAWFORD, Niagara Falls, has taken into partnership Dr. Horace H. Elliott, late house surgeon in Toronto Hospital.

DR. R. M. CUMBERLAND, who graduated at Toronto this spring, will assist Dr. Harper, of Alliston, Ont., during the summer.

DR. G. A. WOODRUFF, of Winnipeg, formerly of Middleville, has passed his exams in medicine in Manitoba University.

DR. D. J. MCKAY, of Ingersoll, Ont., left on Wednesday for Maddock, North Dakota, where he will continue his practice.

DR. J. P. KENNEDY, of Wingham, has been appointed associate Coroner for the County of Huron by the Ontario Government.

DR. CARLAW, of Colborne, left a few days ago for Chicago, where he will pursue a post-graduate course in medicine and surgery.

DR. W. J. PATTERSON, late of Norwood, has joined the ranks of Barrie's medical men, having taken the office of the late Dr. Vivian.

DR. J. A. DUNCAN, who has been engaged at his profession at Church's Ferry, North Dakota, for some months, has returned to Elora.

DR. GUNNE, of Dauphin, Man., has moved to Rat Portage, (now Kenora), where he will join his brother, Dr. Wm. Gunne, in practice there.

DR. WM. H. TYE, who has been practising medicine in Chatham for some years, has gone to Kansas City, Mo., where he will in future reside.

DR. S. MCCALLUM, Thornbury, Ont., has gone to New York, where he intends to spend some weeks in a post-graduate course in the New York hospitals.

DR. AMBROSE STANTON, son of Thomas Stanton, of Pontypool, has been chosen Senior House Surgeon to Sir Patrick Manson, at Greenwich Hospital, one of the most desirable posts in Old London.

MR. I. H. CAMERON and Dr. H. A. Bruce, Toronto, are going to England for three months and will attend the British Medical Association meeting.

DR. W. SARGENT, Springbrook, has purchased the medical practice in Colborne carried on for some months past by Dr. Douglas, and will remove there.

DR. ALLAN MCLAUGHLIN, a native of London, Ont., has been appointed head surgeon at the Marine Hospital at Naples, and attached to the United States Consulate in Naples.

EIGHTEEN nurses have recently been graduated from the Training School in connection with the Winnipeg General Hospital. This is the largest class, with one exception, in the history of the school.

DR. JAS. BRIEN, of Essex, is organizing a company to erect a hospital there. The ground will be purchased within a short time, and work will be begun on the building in time to have it completed by next fall.

DR. W. L. COULTHARD, who was practising for a number of years in Rossland, has taken up his permanent residence in Vancouver. He will be associated in practice with Dr. L. N. Mackechnie, of that city.

DR. H. F. SHANKS, for a quarter of a century in the British medical and civil service in India, Egypt, the Straits Settlements and the Fiji Islands, has located in Victoria, B. C., and will practise there for the future.

A DEPUTATION of Toronto medical men recently waited on the Ontario Government, asking for participation for the other hospitals of Toronto in the grant which the Government proposes to the Toronto General Hospital.

HOUSE SURGEONS, WINNIPEG GENERAL HOSPITAL.—Two men of the staff of the past year, Dr. S. J. S. Pierce and Dr. Brown, have decided to remain for the coming year. The other men appointed are Doctors Harry Murdoff, H. W. McGill, A. Rondeau and B. A. Hopkins.

DR. CHARLES O'REILLY, the retiring Medical Superintendent of the Toronto General Hospital, has had presented to him an address and a handsome table desk and arm-chair of quarter-cut golden oak, by the official and nursing staff of the hospital, over which he so long was superintendent.

GOVERNMENT GRANTS TO ONTARIO INSTITUTIONS.—Estimates for the following institutions were passed :—Asylums, Toronto, $115,406; London, $146,485; Kingston, $92,809; Hamilton, $134,875; Mimico, $83,110; Brockville, $92,369; Cobourg, $26,622; Penetanguishene, $42,984; Orillia, $76,852; Woodstock, $18,020; Central Prison and Mercer Reformatory, Toronto, $68,800 and $31,995 respectively; a total of $931,327.

MCGILL MEDICAL FACULTY APPOINTMENTS.—The following recommendations of the medical faculty in reference to appointments to the teaching staff for the coming session were approved: For appointment, J. A. Henderson, M.D., to be lecturer in anatomy; W. M. Fisk, M.D., to be lecturer in histology; H. B. Yates, M.D., to be lecturer in bacteriology, and J. D. Cameron, to be lecturer in gynecology. For reappointment: J. A. Springle, M.D., lecturer in anatomy (applied); J. R. Roebuck, B.A., lecturer in chemistry; A. A. Robertson, M.D., lecturer in physiology; John McCrae, M.D., lecturer in pathology; D. A. Shirrea, M.D., lecturer in neuro-pathology; R. A. Kerry, M.D., lecturer in pharmacology and therapeutics; J. W. Scane, M.D., lecturer in pharmacology and therapeutics; D. D. MacTaggart, M.D., lecturer in medico-legal pathology; C. C. Campbell, M.D., lecturer in clinical medicine; W. F. Hamilton, M.D., lecturer in clinical medicine; S. Ridley Mackenzie, M.D., lecturer in clinical medicine; A. A. Bruere, M.D., lecturer in clinical medicine; A. E. Garrow, lecturer in surgery and lecturer in clinical medicine; J. M. Elder, M.D., lecturer in clinical surgery; J. A. Hutchison, M.D., lecturer in clinical surgery; D. J. Evans, M.D., lecturer in obstetrics; F. A. L. Lockhart, M.D. lecturer in gynecology; W. W. Chipman, lecturer in gynecology; J. J. Gardiner, M.D., lecturer in opthamology and otology; J. W. Stirling, M.D., lecturer in opthamology and otology; and W. C. M. Byers, lecturer in opthamology and otology.

UNITED STATES.

THE OSTEOPATHIC BILLS before the Legislatures of New York and Pennsylvania, have been defeated.

DURING the past winter there was introduced into fourteen State Legislatures bills which had for their object the regulation of the sales of patent medicines. In all save one state, the bills were "killed."

SERUM FOR TYPHOID FEVER.—Drs. John S. Fulton and William Royal Stokes, of the Maryland Board of Health, claim to have discovered a serum for the treatment of typhoid fever, after nearly four years of investigation and observation.

BRITISH AND FOREIGN.

A DEATH under chloroform during labor is announced from Melbourne, Australia. Only one medical man was present, and at the inquest, the coroner referred to the advisability of always having two medical men present at the administration of an anesthetic.

AN EIGHTY-YEAR-OLD MEDICAL STUDENT.—The Russian Minister of Education has authorized the admission of a man past eighty years to examination before the Examination Committee of Kieff University of St. Valdimir, for the degree of Doctor of Medicine.

RADIUM ADVANCES IN PRICE.—Research work with radium is at a standstill, owing to the scarcity of this metal and its consequent rise in price. An ounce now comes at $3,000,000. It is stated on the authority of an expert, that not more than ½ ounce has been manufactured since Professor Curie discovered it.

SAINT BARTHOLOMEW'S HOSPITAL in London, in spite of the large subscriptions of the King, the Queen and of their friends, is once more in pecuniary difficulties, and the question is being seriously discussed of removing it to a much less costly site in the suburbs among more healthful surroundings. Few are aware that it was founded by Rahere, the famous court jester of King Henry I. It seems that while still a young man his conscience began to trouble him and led him to make a pilgrimage to Rome, where he fell ill, and being in fear of death made a vow that if he recovered, he would build a hospital on his return. He did recover, journeyed home, and his intentions are said to have been confirmed by a vision of Saint Bartholomew, who pointed out Smithfield to him as the best site for his purpose.

It was a most unpromising place at that time, being outside the city walls, little better than a marsh, and with an unsavory reputation as the locale of hideous executions. However, it had the recommendation that its land was of no value, and King Henry, who probably regarded the whole affair as a joke, readily gave his jester a grant of the land.

Rahere set to work first to build the church and then a priory. Having no money to pay for the building, he adopted a singular expedient. Wearing his cap and bells, he started men carrying stone and mortar as a jest. The humor of the thing spread, and vast numbers joined in the joke of erecting a building under such conditions. Though constructed in this way at a minimum of cost, part of the original building, dating from 1102, remains intact to this day.

The original hospital was a part of the priory. On the dissolution of the monastery under Henry VIII., it passed to the Crown, but at the instance of Sir Richard Gresham, then Lord Mayor of London, it was reestablished as a hospital, with a royal endowment. Damaged by the great fire in the reign of King Charles II., it was rebuilt at the beginning of the eighteenth century, and has been added to since. Harvey, who discovered the circulation of the blood, was for thirty-four years physician there.—*Marquise de Fontenoy.*

Special Selection.

A REVIEW OF THE ANEMIA COMMISSION UPON HOOK-WORM DISEASE IN PORTO RICO.

The Commission appointed by the United States Government in February, 1904, for the "*Study and Treatment of Anemia in Porto Rico*" has submitted a report to the Governor of that island. This report covers 209 pages, and is printed both in the Spanish and the English language.

The Commission was composed of experts in their special field, and the amount of work accomplished by these gentlemen, and the exceedingly painstaking manner in which they attended to every detail of the subject stamps this enquiry as one of the most scientific and thorough investigations ever undertaken in the cause of public health.

As early as 1899, Dr. Bailey E. Ashford, who later became a member of this Commission, discovered the parasite *ankylostoma* in the feces of anemic patients who were then crowding the field hospitals of Ponce. This was the first positive evidence that the disease in Porto Rico, known as *anemia*, was not the ordinary form, but *ankylostomiasis* or *uncinariasia*, produced by the parasite sucking the blood, and so prevalent did this disease become during the ensuing years that fully ninety per cent. of the population became affected.

When the Commission appointed by the Government of the United States began its investigation in Porto Rico, it established a hospital consisting of tent-wards, first at Bayamon and later at Utuado, the most anemic districts of the island.

The object of the treatment was first to remove the parasite and then to kill the anemia. To kill the parasite, thymol, malefern and betenaphthol were given, but the preference was for thymol. First, the patient received a purge of salts, and then on the following day he was made to fast until one o'clock, and then was given thymol in doses not exceeding four grammes ; then another purge was given to remove the bodies of the parasite killed with the antiseptic. The purpose of the first purge was to clear the intestines of mucous etc., so as to allow the thymol to act. The thymol and purge treatment was continued once a week until the feces showed no more *uncinaria*.

While thymol kills the parasite and the purges remove them from the intestines, also diminishing the amount of toxines in the

system, these remedies only clear the field for a reconstructive process in the blood, which is necessary to restore the extremely anemic patient to health.

Iron was given in the severe cases of anemia. *Pepto-Mangan (Gude) was the only proprietary remedy reported by the Commission*, the other remedies used being pharmacopocial preparations. That over eighteen pages of the report should be devoted to cases treated with Pepto-Mangan proves the high regard in which the Commission held this preparation, and establishes the unrivalled clinical value of Pepto-Mangan (Gude) in one of the most severe forms of anemia, that of *uncinariasis*, or miner's anemia.

In reading the report of the Commission, the unbiased character of the work stands out clearly, and yet the results obtained point so distinctly to the supremacy of Pepto-Mangan (Gude) that even if numerous other records were not available to prove the clinical value of this remedy, this report alone would suffice to establish Pepto-Mangan at once as the foremost hematinic known. The eighteen cases in which the Commission used Pepto-Mangan (Gude) in the treatment of *uncinariasis*, were selected on account of their extreme severity, and thus these cases represent the most crucial test to which any iron preparation can be subjected. The results obtained with this treatment were extremely gratifying. In nearly all of the cases we find such notes as these: "Excellent condition," "Completely cured," etc., while the difference between the low count of the red cells and the low percentage of hemoglobin (some cases showing only 11 per cent.) at the beginning of treatmennt with Pepto-Mangan, and the nearly normal findings at the conclusion, affords convincing proof of the efficiency of the medication.

A noteworthy fact is that none of the patients showed any digestive disturbance after the administration of Pepto-Mangan, although the remedy was used for many weeks in each case. When we remember the extremely low state in which most of these patients were found on admission, and the fact that several suffered from gastro-intestinal synptoms incident to their disease, this detail is by no means to be underestimated.

The observations of the Commission were made under Government control, and therefore the report may be regarded as a supreme test, and the efficacy of Pepto-Mangan in one of the most severe forms of anemia is proved beyond a doubt.

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Original Articles.

SURGERY OF THE STOMACH FROM THE STANDPOINT OF THE CLINICIAN.*

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There are many reasons why surgery of the stomach should be more and more interesting to the clinician. Chief among these is the fact that with the increasing clinical experience in this field, it has become possible to perfect the diagnosis of conditions far beyond the degree to which this could be done only a few years ago, when it was possible to actually confirm diagnosis anatomically only in those patients who could be subjected to an autopsy. In the vast majority of cases the diagnosis was made upon theoretical grounds. The patient was treated and improved temporarily; during a subsequent attack some other physician made the same or a different diagnosis, which again could not be proven anatomically, the difficulty arising from the fact that no one could prove or disprove the diagnosis in either case. The moment a case becomes surgical, however, this difficulty is abolished, because the diagnosis can and must be proven to be right or wrong.

There is much ante-mortem pathology in diseases of the stomach, as well as in diseases of all the other intra-abdominal

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organs, which can be studied properly, neither post-mortem nor ante-mortem, unless the organ is exposed to view; and no sooner has this been done in a large series of cases than the diagnosis of the condition becomes much simpler and easier and gains greatly in certainty.

Gastric Ulcer.—The condition which primarily or secondarily leads to the greatest amount of stomach surgery is the ulcer. The operation may be indicated, 1. Because of the painfulness of the ulcer; 2. In order to control (*a*) acute or (*b*) chronic hemorrhage; 3. In order to prevent secondary conditions such as (*a*) perforation; (*b*) peritoneal adhesions; (*c*) pyloric obstruction due to cicatrical contraction; (*d*) hour-glass stomach; (*e*) gastric dilation due to obstruction; (*f*) starvation; and last but not least, (*g*) implantation of carcinoma in the ulcer.

Diagnosis of Ulcer.—Since the presence of gastric ulcer primarily is the beginning of so many of the surgical conditions, it is important to recognize this lesion early in its development.

The most constant symptom in the presence of this lesion is pain. This is usually located below the tip of the sternum, is increased upon pressure, and upon taking food. The patient can usually tell which food will cause the pain to become severe. If the ulcer is on the posterior surface of the stomach the pain radiates into the back, usually to the left of the medium line and up as high as the lower end of the scapula.

Very commonly the pain accompanying the presence of gall-stones is mistaken for the pain due to gastric ulcer, but it is usually not difficult to differentiate between these two, because the former is increased upon pressure at the point between the end of the ninth rib and the umbilicus, a point first located by Mayo Robson, while the latter is increased upon pressure in the median line.

Again, in case of gall-stones the pain in the back extends to the right at about the level of the tenth rib, while in gastric ulcer it is greatest in the median line or to the left of this and higher up.

The stomach contents are usually exceedingly acid in the presence of gastric ulcer, and there is an abundance of free hydrochloric acid present unless the ulcer has become carcinomatous. It should, however, be stated here that the chemical examination of stomach contents must always be looked upon only as of value in corroborating diagnosis, made as a result of a study of the history and physical examination. Robson and Graham have demonstrated this fact conclusively in a large series of carefully studied cases.

The history usually states that the patient has felt distress upon eating for a considerable period of time; that there has been eructation of acid stomach contents; that this is much more severe when certain articles of food have been taken; that the patient is much less uncomfortable when carefully following some diet which experience has taught him to select.

Quite frequently the feces are observed to be black from the presence of partly digested blood from slight gastric hemorrhages.

So many of the patients have, however, received subnitrate of bismuth as a remdy, or some form of iron, that care must be taken not to confound the effect of these remedies upon the color of the stools with that of hemorrhage from a gastric ulcer.

Frequently these hemorrhages have not been observed, but still the loss of blood has been sufficient to cause a marked anemia, hence this condition must be considered in connection with the other symptoms and the history. In patients who are severely anemic and who are suffering from some form of gastric disturbance, one can usually demonstrate the loss of blood from chronic ulcer by a careful study of the case. Fuetter has demonstrated that by overcoming this anemia by careful dieting, many chronic ulcers will heal, which without especial attention to this feature seemed quite incurable under non-surgical treatment.

With careful internal and especially dietetic treatment, a vast majority of all cases of ulcer of the stomach which have been recognized early, can undoubtedly be healed permanently, if not only the immediate treatment, but also the after treatment is carried out carefully and conscientiously. That this can be actually expected in these cases has been shown in a large number of patients suffering from this condition.

But there are many of these cases which apparently recover only to relapse again and again. Many of these go from one physician to another, each time temporarily improving or recovering.

Robson has found that most cases which ultimately come to operation have been apparently cured a number of times and our observations fully confirm his report.

It is well to bear in mind this element of the history of any given case, because it should have a distinct bearing upon the choice of treatment in the future. Any case in which there has been a number of apparent cures with subsequent recurrence of the ulcer should properly receive surgical instead of medical treatment in the future.

Differential Diagnosis.—The most common condition which

is mistaken for gastric ulcer is disease of the gall-bladder, especially gall-stones or sand. Next in order comes chronic appendicitis with acute exacerbation during which the pain is usually referred to the region of the umbilicus. In this case the pain is lower down than in gastric ulcer, and it is increased upon pressure in the region of the appendix near McBurney's point.

Renal Calculus.—Has been mistaken for gastric ulcer. In this case the urinalysis will usually clear up the diagnosis, moreover, the pain is increased upon pressure over the kidney, and radiates downward and inward along the course of the ureter.

Duodenal Ulcer.—It is only the fact that ulcer of the duodenum is not very common, which makes the occurrence of mistaking this condition for gastric ulcer somewhat infrequent. This condition has almost exactly the same symptoms as gastric ulcer, but the point of tenderness upon pressure is over the middle of the right rectus abdominus muscle above a transverse line drawn through the umbilicus.

Volvulus.—In rare cases volvulus of the jejunum may be mistaken for gastric ulcer, but the violent vomiting containing bile soon after intestinal contents, but no blood, makes the differential diagnosis relatively easy.

Neurasthenia.—It is often very difficult to make a differential diagnosis between gastric disturbances due to neurasthenia and those due to chronic ulcer. This is especially true, because not infrequently neurasthenia results from the suffering, anemia and inanition which is caused by the presence of a chronic ulcer.

It is quite likely that for several years to come, quite a number of patients suffering from neurasthenia due to other causes will be subjected to stomach operations as a result of erroneous diagnosis.

Any other severe intra-abdominal condition like intussusception, ruptured ectopic gestation, ovarian cyst with twisted pedicle, peritoneal adhesions either septic or tuberculous, may be mistaken for gastric ulcer. In a few cases I have seen an interesting condition which gave rise to a mistaken diagnosis of gastric ulcer. In these cases the great omentum had become attached by its free margin to some point in the lower portion of the abdominal cavity, the tubes, ovaries, uterus, bladder, the cecum or the abdominal wall. The tension of the omentum upon the stomach gave rise to symptoms which could not be distinguished from gastric ulcer.

In a number of patients in whom we had made a diagnosis of gastric ulcer with pyloric obstruction and consequent dilatation of the stomach, we found the pylorus unusually open and th:

duodenum dilated to from 2 to 4 times its normal diameter down to a point below the entrance of the common duct. Upon exposing the jejunum this was found strongly contracted in these cases.

The lymph nodes near the duodenum in these cases were usually enlarged, indicating lesions of the mucous membranes lining the duodenum. In these the pancreas is usually also enlarged, and the gall-bladder is distended with bile, together with mucus, sand or gall-stones, and frequently all of these substances are found in the same gall-bladder.

It seems reasonable to suppose that the obstruction at the point of entrance of the common duct into the duodenum or below the point must be primarily physiological in character, due to the irritation caused by the mucus, sand or small stones in the gall-bladder and duct.

The observations of Cannon and Blake which show that there is a physiological mixing process which takes place in the duodenum is extremely interesting in connection with this particular class of cases. Continued attention to these cases is likely to develop facts which will have great interest for the clinician.

Another condition of clinical interest has been observed in a considerable number of cases. It has been found that many cases of gastric ulcer have previously suffered from chronic, recurrent, or catarrhal appendicitis, usually with peritoneal adhesions to the appendix, or the cecum, or both, or with fecal concretions in the appendix; but always with some form of obstruction to the passage of gas. This pathological obstruction has resulted in a physiological obstruction to the passage of gastro-intestinal contents through the pylorus, and this in turn had been the exciting cause of the gastric ulcer.

Clinically one can usually follow a very interesting sequence in cases of gastric ulcer which do not end abruptly by perforation or fatal hemorrhage, or by what is probably less frequent in cases in which the ulcer is at all advanced, by permanent healing.

At this point, however, I believe that it is proper to express the opinion that it seems most likely that a very large number of small ulcers heal so perfectly that it is quite impossible to demonstrate their existence either ante-mortem or post-mortem, and that there are few cases which go beyond this initial stage without healing which will later heal permanently.

Vicious Circle in the Development of Gastric Ulcer.—It is not uncommon to observe the following history in the development of gastric ulcer:

1. There is severe pain two to four cm. below the ensiform

cartilage in the median line. This may be more severe directly after eating, or only after eating certain things, or it may be most severe when the stomach is empty, and may be relieved by taking food, but its location is quite constant and the pain is increased upon pressure at this point. There is at this point no dilatation present.

2. In attempting to protect the ulcerated surface against traumatism there is a physiological obstruction of the pyloric sphincter. This obstruction may be increased in two ways: (*a*) There may be developed an indurated edematous area due to the extension of the ulcer, or (*b*) as a result of the healing of the ulcer there may be formed a certain degree of cicatrical contraction which in itself will constitute an obstruction.

3. In order to overcome this obstruction the remaining portion of the stomach musculature will become hypertrophied.

4. This is certain to be followed by muscular exhaustation and relaxation, and this will result in gastric dilatation.

5. No sooner has this occurred than the pyloric obstruction is still further increased by the fact that the lower margin of the greater curvature is depressed far below the level of the pylorus, and all of the food must not only be forced through the already obstructed pylorus, but it must also be elevated to the level of the latter aperture.

The fact that in the normal stomach every portion is drawn to a higher level than the pylorus, as the organ is forcing its contents into the intestine, has been shown very beautifully by Bettman, and more recently by Cannon.

6. In the meantime, another condition has arisen which will prevent healing. The obstruction, together with the sacculation, gives rise to the accumulation of residual food in the dilated stomach, which undergoes decomposition in place of digestion. In this manner, all of the fresh food is vitiated by being mixed with the decomposed residual food remnants in the stomach. In this manner, each successive condition makes the previous state of things more grave. In the meantime, two other conditions have arisen which will serve to prevent the tendency of healing in the ulcer.

7. Almost immediately after the beginning of a gastric ulcer, a great amount of mucus is secreted, apparently to protect the diseased surface. This, however, causes the food to become coated, and this in turn interferes with gastric digestion. This condition is followed gradually by the secretion of an increased amount of hydrochloric acid, which is undoubtedly the physiological remedy for facilitating the digestion of food covered

with mucus. With the increasing acidity of the stomach contents, the chances of healing of the ulcer are greatly reduced, and its extension is practically certain, hence each one of the conditions in turn becomes more and more exaggerated, and conditions go from bad to worse, unless a radical change is established whether by internal treatment, or if this prove ineffective, by surgical operation. I have had an opportunity to verify these clinical observations in a very large number of patients suffering from gastric ulcer, and they are in keeping with observations of most clinicians, who have studied such cases extensively. These facts would indicate the importance of careful treatment at the very beginning of gastric ulcer in order to secure complete healing before any of the secondary conditions have arisen, and also the necessity of eliminating all of the primary causes of the lesion in every individual case after healing has taken place, in order to prevent a possible recurrence.

This is especially important, because each successive attack is more difficult to relieve permanently. The chances for permanent relief are more and more reduced, because each time some lesion will remain, which must lessen the resistance of the tissues, or increase, at least, to a slight extent, the difficulty of emptying the stomach.

It is likely, that with proper after treatment, especially as regards diet and general hygiene, it would be possible to reduce the number of cases of recurrence to a great extent. This would reduce the number of cases, which now properly fall into the domain of the surgeon.

Fuetterer has written most effectively upon this phase of the subject, and I am confident it is worthy of our most serious attention. This is true, primarily, because it would permanently eliminate all of the many serious sequelæ, which are now so common.

All of this would indicate that surgery of the stomach begins where internal and dietetic treatment of disease of this organ fails to give permanent relief. It also indicates that surgery, in order to be of value, must result in local rest and in the drainage of irritating contents of the stomach, in all non-malignant cases, and in the early removal of the growth in malignant cases. It seems reasonable to suppose that the most careful attention to diagnosis of non-malignant cases, and the surgical treatment of that portion of those which cannot be relieved permanently by internal treatment, must result in a vast reduction of the number of malignant cases.

At the present time some form of gastro-enterostomy seems

to have given the most satisfactory results. Robson pointed out the fact, most emphatically, that the anastomosis must be located actually, and not only theoretically, at the lowest point in the stomach, in order to be safe and effective, and leave the patient free from regurgitant vomiting "vicious circle."

Theoretically, there seems to be many arguments in favor of a posterior gastro-enterostomy, but practically the results seem equally satisfactory, provided the opening is sufficiently large, and is in fact at the lowest point of the stomcah.

A method has not yet been found, which completely satisfies all reasonable demands for performing gastro-enterostomy. I have had the time to look up only those of my cases of stomach surgery, which I have treated in the Augustana Hospital, hence I will speak only of these in this paper. But the methods and the results have been the same in the cases I have treated in other hospitals, hence this is of no material importance. The following table will give a convenient idea of these operations:

	Total.	Recovery.	Died.
1. Incomplete Gastrectomy	5	4	1
2. Pylorectomy	9	8	1
3. Gastro-enterostomy, Murphy Button—			
Malignant Cases	24	16	8
Non-malignant	10	9	1
4. Gastro-enterostomy, McGraw Ligature—			
Malignant Cases	22	16	6
Non-malignant	65	59	6
5. Gastro-enterostomy, other methods	12	10	2
6. Perforated Gastric Ulcer	10	2	8
7. Gastrostomy	4	2	2
8. Exploratory Laparotomy for Carcinoma of Stomach	32	24	8
Total	193		
9. Ulcer of Stomach, not operated	66	60	6
10. Carcinoma of Stomach, not operated	49	..	15

Patients returned to their homes unimproved, 34.

It will be seen from this that most of the operations were performed for the purpose of securing rest for the pyloric end of the stomach, and drainage for its cavity; also that gastro-enterostomy was performed oftener by means of the McGraw ligature than by any other means. This method has been more satisfactory in my hands than any other up to the present time. I still follow the original direction of the author of the method, which I published in the *Journal of the American Medical Association,* June 6th, 1903. It seems likely that all of the methods now in use will be displaced by some new method which will be more nearly ideal than any now in use.

So far nothing has been said concerning the treatment of any of the sequelæ, or the complications of gastric ulcer, because it is to be hoped that these will be eliminated to a great extent in the future, by the cure of the ulcer itself.

Complications.—The most common complications are perforation and hemorrhage.

Sequelae.—The sequelæ are: (1) Chronic ulcer, (2) stricture of the pylorus, (3) gastric dilatation, (4) hour-glass stomach, (5) peritoneal adhesions, (6) inanition, (7) anemia, (8) neurasthenia resulting from the constant suffering, the malnutrition and the anemia, (9) carcinoma, and (10) jejunal ulcer following gastro-enterostomy.

Perforation.—The diagnosis of perforation is relatively simple. There is a history corresponding to that given for gastric ulcer above. During some exertion, the patient suddenly experiences severe pain in the region of the stomach. This is frequently attributed to the eating of a large meal, and may consequently be mistaken for acute gastritis. The pain becomes diffuse very suddenly. The patient is nauseated, and sometimes vomits blood or bile. The abdominal muscles become rigid; the patient is in a severely shocked condition.

The greatest point of tenderness is in the region in which tenderness existed previously. In many cases the liver dulness is obliterated to a greater or less extent, but it is not safe to place too much weight upon this symptom, because it frequently is present only after the perforation has existed for several hours, and if operation is postponed until this diagnosis can be confirmed by this symptom, the extent of the infection is usually so great that the operation cannot save the patient.

With two exceptions, all of my cases in this class were in this hopeless condition when they were admitted. The important point in connection with these cases is an early diagnosis and an immediate operation. The latter should consist in a free abdominal incision, careful sponging out of stomach contents that have escaped into the peritoneal cavity, closure of the wound in the stomach with Lembert sutures, preferably of silk or Pagenstecher thread. Drainage should always be used.

In cases in which the diagnosis is not made for 24 hours or longer after the perforation has taken place, it is difficult to state which course is the worst to pursue. In my own experience, all of the cases which came under my care in this advanced stage, which were operated on, died within a few days, while a few which were not operated on, recovered, the opening in the stomach

being closed by a plug of omentum. In some of these cases a subphrenic abscess developed, later requiring an operation.

I am confident, however, that these cases were all somewhat less serious from the beginning than those which were operated and died; and it would consequently not be proper to attribute the recovery of the former to non-operative treatment, and the death of the latter to the operation.

It seems proper to advise an immediate operation in all cases of perforated gastric ulcer, in which an early diagnosis is made, and to use one's judgment in each individual case of perforation, in which the diagnosis is not made early.

Gastric Hemorrhage.—A few years ago there was quite a marked tendency toward the immediate operation for gastric hemorrhage. Mayo Robson's experience in this direction was so encouraging, that quite a number of surgeons favored operative treatment for this condition. It seems, however, that this is quite unnecessary, because in almost every case the hemorrhage will cease, and if the patient is carefully treated, her general condition can be greatly improved, so that the risk of the operation itself will be much less than when performed during a hemorrhage.

The treatment should consist in exclusive rectal feeding. It may be well to administer from two to four ounces of castor oil early in the treatment, and then to place nothing whatever in the stomach, until there has been no blood in the evacuations for several days. Feeding by mouth should be begun with great caution, and as soon as the patient's general condition is good, the operation should be performed.

Sequelae.—In the treatment of the first three in the above list, (1) chronic ulcer, (2) stricture of pylorus, and (3) gastric dilatation, the method must be the same. It must consist of drainage of the stomach cavity by gastro-enterostomy, or in rare cases by Finney's pyloroplasty. The one point of greatest importance which must not be overlooked, is the choice of location for the opening in the stomach at its very lowest point.

Rodman's suggestion, advising the excision of the ulcer-bearing area in these cases, is undoubtedly worthy of consideration. In my own experience the results have been more satisfactory in cases in which I have excised the pylorus in connection with making a gastro-enterostomy, but as this adds another element of danger to the operation, it may be well to continue our observations, before making this a routine treatment in these cases.

In cases in which a pylorectomy is not made at the same time, the gastro-enterostomy opening is likely to become partly or

completely obstructed by contraction, and this may be followed by a recurrence of the ulcer. In cases in which a pylorectomy has been made, this has never occurred in my experience.

At the present time the choice of operation must lie between the methods introduced by McGraw, that employed by Mikulicz, Moynihan's method, or the method developed by Robson, Murphy's oblong button; or Connel's suture method can be employed in connection with the methods of Mikulicz or Robson, but it seems likely that the button will continue to lose more and more of its old advocates while it is not likely to gain many new ones. This is true, especially, because with it the size of the opening is virtually limited, and there is a distinct objection in the minds of most surgeons against a non-absorbable foreign body.

The one great point in favor of the button is its ability to punch out an opening, and to leave the union between the stomach and the intestine with the slightest possible amount of connective tissue.

In order to be of any practical value this paper must point out some of the dangers to be avoided in surgery of the stomach.

Unnecessary Traumatism should be Avoided.—There is great danger in unnecessary manipulation, because this increases the shock and the tendency to infection.

In all of these cases much can be done to prevent this by making an ample abdominal incision. Much time is frequently occupied in finding the jejunum, resulting in useless handling of viscera. By simply lifting out the transverse colon, and following its mesentery to a point a little to the left of the median line, one can always find the beginning of the jejunum in a few moments.

In gastrectomy and pylorectomy it is possible to reduce the manipulations to a minimum by simply grasping the four main arteries, and also the greater and lesser omenta between these four points, and then excising the intervening portion, which has been grasped by long-jawed forceps, in order to prevent leakage.

There is danger of necrosis of the stomach, if the gastric artery is injured, and of the transverse colon, if the middle colic artery is grasped in clamping the greater omentum.

In making a posterior gastro-enterostomy, there is danger of contraction of the opening in the mesocolon, unless the edges of this are sutured to the stomach.

There is always danger of angulation of the jejunum at its point of attachment to the stomach.

In all stomach operations it is well to have the patient placed in the sitting or semi-sitting posture, within a few hours after the

operation, in order to prevent hypostatic pneumonia, and to facilitate drainage of the stomach by gravitation.

The greatest danger after operation comes from acute gastric dilatation, but this can be remedied readily by introducing the stomach tube. If gastric lavage is employed, it is, however, important not to introduce a sufficient amount of solution to do harm by pressure. Half a pint at a time is quite enough water to introduce. It is a rule with us to make use of gastric lavage, whenever any patient is distressed after an operation upon the stomach.

In three cases in which gastro-enterostomy had been performed for the relief of pyloric obstruction in my series of cases the progress was perfectly normal for 3, 5 and 8 days, when the patients suddenly began to suffer from dyspnea: This continued for 6 to 12 hours, when the patients died. In the first two, an autopsy was not permitted. In the third it demonstrated the fact that the patient had died as the result of acute gastric dilatation.

We had previously had a number of similar experiences less severe in character, in which the dyspnea had subsided at once upon the use of gastric lavage, but it had not occurred to us that the distress was really due to acute gastric dilatation.

One would think it almost impossible for this condition to escape recognition, but the presence of the dressing over the abdomen, and the fact that the distress is referred to the chest, is almost certain to lead one astray, unless one's attention has been directed especially to the possibility of the occurrence of this condition. We have since observed this acute gastric dilatation to a greater or less degree in a number of cases, and have always been able to obtain prompt relief by the use of the stomach tube. Aside from the gas one always finds decomposing mucus and usually some old blood.

It is well to bear this possible condition constantly in mind in the after treatment of these cases.

Feeding.—These patients should be given one ounce of one of the various predigested foods in three ounces of normal salt solution as a nutritive enema every four hours.

After the third day some of these predigested foods may be diluted in water and given by mouth, but the rectal feeding should be continued.

Later, broths and thin gruels may be given, but milk should not be given until quite late, as it is rather more likely to decompose than these predigested foods.

The patients may be permitted to chew steak, and to swallow the juice within a week after the operation.

THE AMERICAN DISEASE: AN INTERPRETATION.*

By William Broaddus Pritchard, M.D., New York.

Medical nomenclature, certainly as regards names for many diseases, stands to-day the most neglected, the most incongruous, the least rational, and the least progressive of all the minor divisions of the subject. Many of those most familiar justify a continued existence solely through the fallacious law of traditional custom. In some instances, both name and disease being inelastic—typhoid fever or epilepsy, for example—no special harm is done. In others, as hysteria and chorea, we continue to insult intelligence apparently without either consciousness of shame or hope or desire for reform. There is something of promise in the tuberculosis of to-day rather than the consumption of our fathers, but much remains to be done, the work having scarcely begun. The field of neurology, perhaps more than any other, needs the scythe and pruning hook. The latter instrument could, in my judgment, be used with particularly beneficial effect if employed vigorously and with discriminating judgment in neurological nosology. Its first work, if in my hands, would be to clip and trim and shape into at least some semblance of definite form and substance that phantom, once a tree, now a forest and rapidly becoming a wilderness, so rank and riotous is its growth, neurasthenia. No shorter road to nervous prostration exists than along the route of present interpretation and mental comprehension of the term as generally understood or misunderstood. I confess to an antipathy—I think rational though amounting almost to an obsession—for the word. Originally intended to possess a definite significance, its field of application has been so elaborated and broadened and abused that to-day it means almost anything and with equal truth almost nothing. The inspiration which gave it birth marked the genius, but the child has grown a monster, fattening upon the flesh of hundreds of brothers and sisters, and even its cousins. It is still from custom classed among the neuroses or psycho-neuroses, and thus the special property of the neurologist, but like its twin sister—the only sister left, by the way—hysteria, it has wandered afar with an omnivorous appetite and is known to-day and claimed in some one of its hydra-headed forms

*Read before the Ontario Medical Association, June, 1905.

in every field of medicine. To the stomach specialists belong the gastric and lithemic types, to the surgeon the post-operative and some of the traumatic cases. The sexual neurasthenic is the property of the genito-urinary specialists, the reflex cases are almost equally distributed to those who know the eye, the ear, the nose and throat, while the neurologists divide the remainder with the gynecologists, or play battledore or shuttlecock with all. The general practitioner alone is counted an invader in this field, and he, wise man that he is, with appreciative philosophy, rarely feels himself aggrieved.

My criticism is not of the term etymologically. On the contrary, properly restricted in interpretation, it is an excellent example of word-making. It should stand, however, for either fish, flesh or fowl—for a definite entity or syndrome—if retained in our nosology. If discarded in this field, by all means keep it, but restrict it to the broad, descriptive significance of a generic term alone. I am not yet willing to accept the dictum embodied in the recent paper of an eminent American writer who, with a stroke of the pen, announces the passing of neurasthenia, for which he would substitute a group of pure psychoses, if for no other reason than that he leaves us none the better off for such a begging of the question; and yet one is almost tempted to let it pass away into final oblivion and without a protest on reading a serious thesis by another recent writer upon neurasthenia in babes. If it is to continue a neurological and general medical waste-basket into which we are to dump all forms and degrees of illness associated with irritable, nervous weakness to which we cannot attach a standard label, then it cannot be lost too quickly. It means to-day to the student mind mystery, confusion, chaos and correllated aversion, curiously mixed with a contradictory fascination; to the patient it has become a term full of suspicion; to the medical teacher it is a term of reproach. No observation or experience during my fifteen years of post-graduate teaching has been more emphasized than this attitude or mind of the student body. Year after year and many times a year, the cry has been the same from all my classes: "What is neurasthenia?" I think you will agree with me that something should be done. The solution of the problem to me seems relatively simple. Let us stop running after strange gods and the making of false idols and return to the worship of our fathers and to one faith. There *is* a nervous affection—the very same which originally inspired Dr. Beard to coin the word, with a broadly constant symptom picture, a more constant etiology, a conjectural pathology, a fairly certain prognosis and a definite

plan, in principles at least, of treatment, the chief and essential symptomatic manifestation of which is an irritable, quick exhaustion of nervous function in many or all directions. It has become almost lost, it has suffered degradation, it has fallen from the genus to the species in the literature of the subject, not so much through intrinsic conditions, but because of the confusion and chaos of interpretation. The dignity and importance of this subtype, its rapid and progressive increase, the charm and fascination of its study and of its remedial and curative treatment are such as justify and, indeed, demand that it be taken from this chaotic mass and be given a distinct identity. Let *this* be neurasthenia. We shall simply give back to Cæsar what was his, lost property to the original owner. It is but the restoration of the birthright. How the thief will cover his nakedness is his problem, not ours.

I have but borowed for a purpose my title, and having explained my motive, I discard it. And yet it is not altogether bad. That it has the ring of cheap sensationalism is a just criticism, though nothing was further from my mind, a disavowal which I hope has been anticipated and is accepted. In much that the condition that I have in mind represents, in much that is peculiar to this affection—to neurasthenia—the term, the American disease, is both accurate and appropriate. As I conceive it, it *is* an American disease indigenous to this soil and essentially a product of causative conditions peculiar to this country. That it now exists elsewhere, and probably always did in sporadic form I do not doubt, but this is its home, this its soil, this the atmosphere in which it luxuriates. What is this disease? What are its symptoms? How differentiate it? What is its etiology and prognosis, and how is it to be treated? My limit of time will permit me to create the scheme of the picture only, but if the viewpoint be the proper one and the perspective liberal in breadth, any one of my audience will, I am sure, be able to do the filling in. I would count my work well done and a good end accomplished if I did no more than infect you with the enthusiastic interest with which the subject inspires me. In the effort to do so I shall create part of the perspective referred to. First as to your material: Neurasthenia never occurs in fools. The idea constitutes a paradox. Neurasthenia may make a fool, but you cannot make a fool a neurasthenic. It is a disease of bright intellects, its victims are leaders and masters of men, each one a captain of industry. Each case is unique as a study if you are to study helpfully. There are no arbitrary limits to the horizon of studious effort. The political

history of the world has been made largely by paranoiacs. Mahomet, Peter the Hermit, and Oliver Cromwell are examples in point, to go back no farther. In each there was an imperative and an impelling monomania. The world of literature, of art and of science, of fruitful endeavor in all higher fields, is indebted in an analogous degree to the neurasthenic, analogously endowed with an imperative and an impelling energy. Dr. Gould's list includes such names as Carlyle, Wagner, Huxley, Spencer, and many others. The confidence, the faith of patients of this type, is to be classed as an inspiring stimulus in itself and is well worth the struggle to grasp understandingly this subject. That yours is the helping hand depended upon by such men—such giants—whom you may lead as little children; the knowledge that you, and sometimes you alone, may bring back into the world's arena of action and into the old supremacy, such factors in the world's work, represents to my mind an objective, a purpose, a sphere of usefulness second to none of the many laudable ambitions along the highest planes of medicine.

In painting the clinical picture it would mar my scheme to paint an individual likeness. I shall give you first the basis for a composite photograph, made up of the case histories of fifty selected patients from private practice. Forty-two of these were American born, the remainder, 8, with two exceptions, had been residents more than fifteen years; 22 were from New York City, 4 from Connecticut, 3 from Massachusetts, 5 from Pennsylvania, 2 from New Jersey, 5 from as many different Southern States, 1 from Canada, and the remaniing 8 from as many different sections. Forty-three were from cities of more than 100,000 inhabitants, although only 21 were city born. The average age was 37, the oldest 62, the youngest 26. Without a single exception all were brain workers. Sixteen of these fifty had been makers of history in different spheres, some large, some small; mercantile, literary, religious, scientific, political or economic. Two of the number were among the hundred captains of industry assembled in a list made to commemorate a national function celebrated a few years ago. By occupation 13 were financiers, in multiple mercantile lines, really better described as promoters; 6 were lawyers, 3 clergymen, 2 merchants, 5 physicians, 5 brokers, 4 school teachers. Of the remaining twelve, 2 were professional politicians, 2 corporation officials, and 4 managers of large industrial plants. Four of the fifty were men of independent, self-acquired means, who described themselves as having no occupation at the time of record. They have been included in the groups mentioned according to previous occupation. Four of

this series were women, 1 a journalist, 1 an actress, and 2 of them teachers. Fourteen of the fifty were unmarried, the age average of this series of fourteen being relatively high, forty-four. The four females were all childless, though two of them were married.

Instead of an analytical elaboration of individual symptoms, let me give you a standard clinical history selected from the series of fifty as a type portrait.

M., aged 33, male, born of healthy good stock, American parentage, the only handicap being parental poverty. Driven by necessity and by that subtle factor, temperament, to early effort in extraordinary degree, he acquired the strenuous, ambitious, high tension, keenly sensitive habit. He could not afford a liberal or broadening education, because his own dollars paid for it. At 19 he was in business as apprentice in a large establishment manufacturing mechanical engineering appliances. At 26, with a capital of $500, he organized a company, had it incorporated, was president, secretary, treasurer, superintendent, salesman and chief stockholder, entering into competition with established and lavishly capitalized rival corporations. Awake at 7, he hurried through breakfast a few minutes later, mixing an omelet with an order or a countermand, assimilable sometimes with the former, always incompatible with the latter, taking in with his coffee the London market or the Paris bourse, dividing the steam supply between brain and stomach when it should have been all turned on at the point of physiological demand. A hurried walk to the train, possibly a delusional constitutional in this very walk, the steam being still turned on to the top floor. In the office a pile of mail, interviews with clerks, orders, directions, instructions, detail work in every department. Just here *en passant* is laid the immediate foundation of the breakdown. It is the man of detail, the man great in everything except the qualities which make the general, who becomes the neurasthenic. It is the crime of attending to minutiæ which makes the nervous derelict. The general is never a neurasthenic. It is the one flaw in the statue of true greatness. That quality, the highest, which helps us to select our lieutenants, is always lacking. The neurasthenic is the archtype of the pooh-bah. He is not only general, but also colonel, major, captain and private. The penalty is inevitable. No man can do the work of four along higher lines without paying for it.

After four hours in the office this man goes to lunch, tired, nervous and with preoccupied mind. He takes his secretary or

manager, and again the attempt is made to mix a steak or an omelet with a business problem. The steam is still turned on at the top, our patient eats fast and drinks a lot of water or other fluid, prematurely flushing the contents of the stomach into the intestine. Already by nervous inhibition he has interfered with biliary and other secretions. The intestine, the duodenum, cannot take care of the albumenoids—the proteids—properly. It cannot take care of its own. The alkaline reaction of duodenal secretion has been upset by the flushed overflow of acid gastric juice, the secretion of bile has been inhibited by the state of mental tension and the diversion of energizing agencies from digestive viscera to brain. Fermentative decomposition with resulting ptomaine and toxine formation follows, deficient nutritional assimilaton plus chemical irritation are added to cell fatigue along a routine line without rotation. Notices of protest begin to come into first subconscious recognition, but are disregarded. They may come from any one of many sources. Headache of the cincture or helmet type, vertigo, a sense of irritable weakness, mental and physical follows; vague, mysterious messages in a strange language never heard before, are received but not understood. This patient has always been well and has had no training along the lines of familiarity with symptoms. These messages at first ignored, sometimes hushed with a cocktail or a highball, or many of both, become more and more continuous and imperative. The habit of almost mechanical activity of mind projects itself into the hours for sleep. Insomnia develops, at first as dreamful, anxious sleep, then with fitful, broken sleep, and later with an allowance cut by more than half from the normal. He wakes tired, irritable. The pneumogastric is one of the first and often the most emphatic of the aggrieved protestants. Palpitations, overaction, an irregularity partly toxic, lay the foundation for what later has become an obsession of fear of sudden death—heart anguish. He fears to be alone, to walk alone, to sleep alone. To this other fears have been added. A perfectly legitimate dizziness has laid the foundation for an almost hallucinatory persistence of this impression. Rapid motion, as in the cars or a carriage, high places, sudden changes in the visual perspective, originate as many phobiæ. Every nerve gets on edge and this hyperesthesia of auditory, or visual, or olfactory, or gustatory, or pneumogastric nerve, varying, as it necessarily does, in degree, gives explanation for the protean system picture. It is the mystery of it all which leads to introspection in attempts at explanation, and finally to an exquisite exaltation of subject consciousness, a veritable delirium of anguish.

Neurasthenia is essentially a recoverable affection. In a majority the recovery is complete and final. In a few, usually neglected or mismanaged cases, the recovery is imperfect, relapses are common and the neurasthenic habit becomes almost a part of the individual. Even in these cases a steadily progressive tendency to recovery and to a normal poise as the final fixed habit may be established by persistent effort based upon an intelligent understanding of the general principles of treatment plus an appropriate application of such principles to the personal equation of the particular patient. Neurasthenia carries with it no penalty to succeeding generations. This statement is contrary to *a priori* reasoning, and also contrary to routine teaching and unthinking or ignorant belief. It is a statement based, however, upon careful observations in an extended experience, and I believe it to be absolutely true. The victim pays the whole penalty; the disease is free from the law of entail. The high average standard of good health and nervous poise in the children of neurasthenic fathers has been a frequent personal observation.

I do not believe that any individual case of neurasthenia ever originated in a single cause. The very essence of the affection makes such an hypothesis a paradox. Equally true is it that no single agency is sufficient to explain the prolonged maintenance of this condition. Any one of many causes may appear to dominate in a given case and for a given time, but the carefully studied etiology will prove a complex one in every instance. The list of stereotyped and empirically accepted causes is a long one and undergoes a progressive expansion from year to year. Overwork, worry, prolonged mental tension and anxiety, malnutrition from deprivation of food, sleep and rest, toxemia of autogenous and heterogenous sources, shock, trauma, reflex irritation, and as many more are on the list. Most of these are contributory factors only, and some are effects which are essentially secondary, being part of a vicious cycle, vicious in fact and even more so in interpretation. The insufficiency alone of any of these factors is tacitly admitted in the usual statement that an hereditary predisposition is fundamentally necessary, a proposition not sustained in my own experience, though carefully investigated always. Neurasthenia is, I believe, essentially an acquired state and heredity, except of temperament and a high grade cortex, is an almost negligible equation. My chief criticism of the ordinary etiology as outlined is the narrow viewpoint with resulting technical limitation in treatment. What is the cause of these causes? *The* factor in neurasthenia in the American

disease—the factor common to all cases—is, broadly, that of atmosphere—the atmosphere peculiar to this country, the atmosphere of limitless possibilities, not in one field, but in all; in commerce, in art, in literature, in every field of intellectual accomplishment. It is this ether of limitless possibilities which stimulates the individual to a degree of effort, of tension, of strain, of superstrenuous endeavor, impossible and unknown, except by the infectiousness of example elsewhere. There is no limit to the game, and everybody may sit in. America is the only country in which you can go in with one white chip and have a chance to quit the biggest winner. It is this atmosphere which is the incentive to overwork. It is the anxiety, the tension, the strain of the game, which brings worry, loss of sleep and all the rest; and even here the penalty comes indirectly. The intoxication of endeavor, the delirium of effort, is at the expense of all conservatism. The laws of nature—inexorable as fate—fate itself in fact, are violated not daily, but every hour. The hygiene of life is set aside. All kinds and degrees of insult are offered to brain, stomach, heart and every other organ. Day after day the steam is kept turned on and at full pressure to the one floor, and, worse still, often to the one room. Is it any wonder that all the rest of the house grows cold, or that, the power being insufficient, the machinery of the lower floors works poorly and makes poor goods? Every function suffers sooner or later. One after another, and sometimes several together, they protest, then openly rebel and finally go on strike. Indigestion, toxin and ptomaine formation, torpor of sewerage function and resultant, defective elimination add the element of chemical irritation, or autoxemia, or lithemia, to the situation. The tired brain cell gives way under this added handicap and goes out on sympathetic strike.

The accident of dominating symptoms in a given case is but rarely of any value in determining the etiology. Gastric and lithemic and other types may be recognized and distinguished symptomatically with some minor advantage, but no more serious error of interpretation exists than to conceive of them as primary etiological types with a correllated therapeusis. Antilithemic drugging will not cure a lithemic neurasthenia nor will lavage make well your so-called gastric cases.

I have again and again noted a urine with specific gravity above 1,030 with 14, 16, 18 and even 20 grains of urea per ounce with lime oxalate and urates in abundance, all these conditions giving way to the normal under direct treatment, the neurasthenia remaining essentially unchanged. I never knew a sexual

neurasthenia, so-called, to be cured by any plan of direct genito-urinary treatment, and this statement applies with equal truth and force to all efforts (and I have seen many) to cure the reflex cases by removal of a supposed cause in any peripheral irritant.

I know of no condition in medicine which demands more exactingly of the physician all the diagnostic resources of the profession, and yet mistakes in diagnosis should be rare. The symptomatic semblance of neurasthenia—the pseudo forms—which may sometimes present much of the picture, but will always show a radical omission or addition somewhere, should always be in mind and should be excluded carefully seriatim. More than one patient referred to me as a neurasthenic has been found to be the real victim of tuberculosis, of malaria, of Bright's disease, of gastric ulcer, or some other similar affection. Anomalous forms of Basedow's disease in women and various toxic states among men have represented especially common mistakes in diagnosis. Paretic dementia in its incipient stages and some forms of melancholia, particularly the affective types, demand special mention. A guarantee of escape from the opprobrium of error as to the pseudo types is possible only through an exhaustive recourse to all measures and methods of accurate information. Elaborate urinalysis, blood examinations and often examinations of the sputum is a routine procedure with me. In any case in which the dominant symptoms are referable to a particular function or organ persistently, I am proportionately suspicious of a local disease at least complicating the general state. It should not be forgotten that a neurasthenic may have a coexistent Bright's. In Basedow's disease which, as we know, may utterly lack the spectacular symptoms, the absence of goitre and of exophthalmos may easily lead us to interpret the nervous irritability, the quick exhaustion, the fears, the digestive and other functional disturbances, the loss of sleep and the widespread vasomotor symptoms as due to a neurasthenia, but the habitual quick pulse, the shallow respiratory action, the diarrhea and the *tout ensemble* of constancy in the picture will always give rise to doubts which will be converted into negative certainty when the etiology is considered. From paretic dementia we can distinguish neurasthenia by the presence in the former and the absence in the latter of organic signs. No matter what the degree of incipiency, if the disease has advanced to the point of inducing symptoms, we shall find in paresis somewhere some of the physical signs. Special care should be observed in the melancholic (by the way, the majority type) forms

of paresis. In melancholia we have, no matter what the subtype, a constant syndrome; a characteristic facies, a post-cervical ache, a shortened sleep, an irrational melancholy and a tendency to suicide. In neurasthenia this facies is absent and the tendency to suicide is rare. Melancholiacs get to sleep as a rule with but little difficulty, but wake too soon, at 2, or 3, or 4, and sleep no more. In neurasthenia they sleep lightly, dream much and wake often. The post-cervical ache may belong to both, but in neurasthenia it is often a cincture or helmet headache, quickly dissipated by mental diversion. The neurasthenic can laugh, the melancholiac cannot. For a melancholiac to laugh is to refute the diagnosis. From myasthenia gravis it is to be distinguished chiefly by the absence of dominant bulbar symptoms.

What is the pathology of neurasthenia? The answer is almost anyone's guess, and yet to know the lines of experimental research and investigation already established is a long step in the direction of what will finally prove the correct guess. The work of Hodge, familiar to you all, was a far call in the right direction, and while it has given us no final solution, it probably paved the way to the yet to be demonstrated pathological explanation of these cases. The effects of fatigue, of worry, of irritation, upon the brain cell structure was proven to be actual and demonstrably so, by his work. Barrows has added observations which demonstrate with equal positiveness, the structural and sometimes actually organic changes and results which follow to the cell from malnutrition. All neurasthenics, it should be remembered, are examples of malnutrition from faulty assimilation and metabolism, usually secondary. The work along chemical lines with a final explanation in states of auto-intoxication promises much, but that which appeals most strongly, even though as yet it offers least in a tangible, material way, is a combination of the others with an imaginative elaboration of the ion theory. The analogy of the highest governing nervous system with a telephone service in a large city has occurred to many, appeals to most of us and is familiar to you all. We have all been able to grasp mentally some conception of the power plant, the conducting wires, the receiving and transmitting station of the subscriber and a central, but the plan of a central switchboard is where we stop. The hello girl of the central station will not do. She is too unreliable; she goes to sleep on post; she talks distracting gossip; she has no sense of duty at times. Her sole stimulus to duty well done is often the approval of the inspector only and the $10 per week. Neurasthenics don't gossip, they don't go to sleep—more's the pity—and yet the

switch gets out of gear and you cannot get a connection, or if you do there is a buzz and you can't understand which stands for the weakness; to which we might add in carrying out the analogy, the usual profanity, to represent the irritability. Mendelssohn, Frankhouser and others, in attempts to give a tangible, graspable explanation of electrical action upon nervous function, have advanced and elaborated what might be called the theory of wandering ions. You will recall that when first announced, the neuron theory, in addition to facts proven, claimed, but did *not* prove a distinct individuality for each neuron, with no anastomosis anatomically with our neurons. This undemonstrated claim was unaccepted for the reason that it left less explained than before the observed and familiar facts of concert of action and synergistic relationship of nervous function which seemed to demand some anatomical connection. Imagine bodies endowed with autogenous mobile life, which stretch an arm from 1 to 5, or A to G, wandering about with a restless usefulness, connecting two separate souls who want to get in touch in the same way, but with infinitely more of reliability, as the central hello girl connects you up with the number you send in from the transmitting phone. Imagine these little bodies goaded day after day to extraordinary effort, allowed no rest, no sleep, whipped by alcohol, or tobacco, or coffee, suffering from deprivation and irritation in every way, rations served foul, working for a thoughtless, selfish, utterly inconsiderate master. Do you wonder that they get discouraged, tired, exhausted and confused, taking messages wrong, turning in a fire alarm here, calling in the police there, doing many things which they should not do and leaving undone those things which they should do? Very pretty, you will say, but fanciful, I admit it, but I deny any more of fact in any other theory.

The first step—the essential foundation of any plan of successful treatment in neurasthenia—is the establishment of a proper relation between physician and patient. The status of the physician should be firmly established before the question of treatment is considered at all. He will have laid the foundation of any plan of successful treatment well in a direct ratio with the thoroughness, the exhaustiveness of his diagnostic examination of the patient. Nothing should be taken for granted—no second-hand information should be accepted. At the risk of being tedious, examine for yourself. Five minutes or less is often more than sufficient time for a final diagnosis in paresis or tabes—two hours is often time well spent in the first examination of a neurasthenic, and this is true even in the instances in

which as many minutes only have been necessary to convince you of the nature of the case. Remember there are two parties to the transaction. Your own enlightment is not the only requisite. The neurasthenic always takes himself and, at least, some of his symptoms seriously. To tell him abruptly that this or that means nothing is not convincing to him, however true to you. No obvious foundation has been laid for so positive a statement in so short and superficial an examination. To you many of the symptoms are distorted by exaggeration, to him they are real. Do not forget the axiomatic fact that neurasthenia does not develop in a fool, and as corollary to this fact make your appeal to the intelligence of your patient. Explain things; give the patient something tangible to grasp, some explanation which appeals to reason. He will leave the ether of imagination and come down to the terra firma of fact gladly. The effect at first may be upon the subconscious ego only, but the leaven of action will later rise into controlling consciousness. The physician, by the way, should never think, or believe, or guess; he should know. Therefore, he should lay at least a plausible foundation for such knowledge in a patient examination at the first interview. It is just as important that a reverse attitude should be the rule thereafter. Discuss with your patient in subsequent interviews every topic conceivable except his ills. At stated intervals go over the case objectively, taking an account of stock. Where favorable progress is noted, not only mention it—prove it; if still *in statu quo,* explain the delay in results. Silence is rarely golden in such situations. Equally important with this factor or proper relationship between doctor and subject is the control of the patient's environment. Just which is proper varies with different cases, but once settled, it should rarely vary with the case. Compromises and concessions are always dangerous. The patient's hand should never touch the tiller, once you have taken charge of the ship. First, place him so as to minimize the influence of all adverse factors, domestic, financial or otherwise. Break up, as far as possible, all subtle or obvious factors which contribute to a morbid introspection by conscious or subconscious association. Encourage objective consciousness by a change in the physical and mental atmosphere. Sometimes this must be done radically, and the patient cut out from the family or from his business. Never leave him alone, and never leave him idle. Put with him a tactful, resourceful, sensible, attendant—train your own nurse, by the way—train him over again, if a hospital graduate. Don't call him a nurse in any event—neurasthenics resent trained nurses. Give all

your instructions to this nurse-companion—never to the patient, who should have nothing whatever to do with his case. Arrange all details of diet, of exercise, medicines, baths, diversion, etc., with the nurse. Give your patient a chance to escape from a knowledge every hour of the day that he is a patient. Keep him busy, fill in every minute of the day. A salt rub in the morning, the patient standing in eighteen or twenty inches of hot water, three minutes of practice in deep breathing exercises, after which comes breakfast. All meals should gradually be made as full and as nutritious as possible. I observe idiosyncrasies, but no other law of special diet. After each meal from twenty to thirty minutes of recumbent rest is insisted upon—a habit observed by nearly every carnivorous animal, except man. Next comes the daily visit to my office, with treatment by the galvanic current, one electrode back of the neck, the other over the forehead, both as large as possible, in order to get the utmost diffusion at the point of contact and thus a maximum of electricity with a minimum of discomfort from local action. A steady battery, a rheostat, a metre, and proper electrodes are absolutely essential. Part of the benefit is undoubtedly due to suggestion. This is a small part, however, by comparison with what I am firmly convinced by years of careful observation to be an intrinsically dynamic effect of sometimes striking benefit from electricity thus administered in these cases. I never exceed five milliamperes in amount, or half an hour for the seance. Usually I begin with one milliampere and a five-minute seance. On leaving my office, my patient goes direct, riding or walking, according to circumstances, to a gymnasium, the director of which, Dr. Watson L. Savage, is a medical graudate, whose life-work has been given with enthusiasm to the co-operation, elaboration and perfection of a plan, which we both believe will, when perfected, prove a specific, curative treatment for these cases, a proper environment and control being the only other essentials. By this plan of psychophysical, educational control, we secure, by the indirect method, what is always difficult, and often impossible, by any direct plan—a lowering of tension, a mental relaxation, a return to rational inhibition, to order from chaos. These patients are taught the lesson of physical, muscular relaxation—how to lie down, how to go through the mattress to the bottom, how to turn loose physically. That the muscular system is energized and overkeyed into states of hypertension through sympathy with states of mento-nervous exaltation is familiar to us all in the tense mouth, the corrugated brow, the clinched hand, the restless walk. We simply start at the

other end, and re-educate the higher through the lower. The quickest, the surest, the most rational way to key-down a man mentally, is first to key him down motorially. I have waited for ten years of results to accumulate before announcing publically, except in the lecture-room, the value of this procedure. I give you no experimental theory. My unqualified endorsement is based not only upon a rational conception but many confirmations in experience. I count this part of the plan of treatment in neurasthenia one of the most positively helpful and essential of all the major details. The afternoon, following lunch and another half-hour of rest, is spent out of doors—a drive, a horseback ride, golf, tennis, a walk, a visit to some museum or place of public interest; a shifting from one to another of these various diversions, largely based upon the personal equation of temperament and aptitude in your patient, fills up the afternoons. In suitable cases part of the evening must be filled, and occasionally the theatre or a concert can be utilized, but never at the expense of sleep, if insomnia be present. A half-hour of massage at bedtime closes the day's work.

This one symptom, insomnia, must be controlled always. Make your patient sleep—count a dreamful night insomnia. Veronal, trional, sulfonal, in 5, 10 and 15-grain doses, are effective and satisfactory. I often shift them. All should be given in some hot menstruum. No nervous patient should ever know his drugs—send the prescription yourself, and always mark it, "No copy. Do not repeat." Fifteen years ago a few neurasthenics under my care came back to health and nervous poise in spite of the drugs which I employed in treating them. For five years past, using less than half the drugs, my percentage of recoveries has increased fourfold. Drugs play a varying part—sometimes no role at all, again a vital one. Some patients demand them, others are indifferent, and still others need them neither mentally nor physically. Sleep must be secured and maintained, elimination and prompt sewage function regulated and complicating accidents combated. For temporary use, until the regime outlined becomes effective in lessening it, the mental state of unrest and hyper-psychical esthesia should be controlled, and the drug which most effectively accomplishes this purpose is opium in the form of the denarcotized, aqueous extract in doses from one-tenth to quarter-grain three or four times daily. Free water drinking between meals is a desirable habit to encourage and a positive water, always symptomatically remedial in cases in which lithemia is an aggravating factor, is the Royal Fachingen. I do not believe in the

sanatorium treatment of these cases as I know sanatoria. If the ideal sanatorium existed, the sanatorium plan would be ideal. I add nothing to your personal knowledge, when I tell you that such an ideal does not exist. I can conceive of no more fitting nor important statement in conclusion than one of condemnatory criticism of the misapplication of the Weir-Mitchell plan of rest and isolation in these cases. It is to be condemned first, as involving the conception of a *routine system or plan* of treatment; second, as encouraging introspection; and, third, as violating in principle all intelligent interpretation of the whole subject. For women and feminine males it will do no harm; for men and masculine women it is an insult to intelligence.

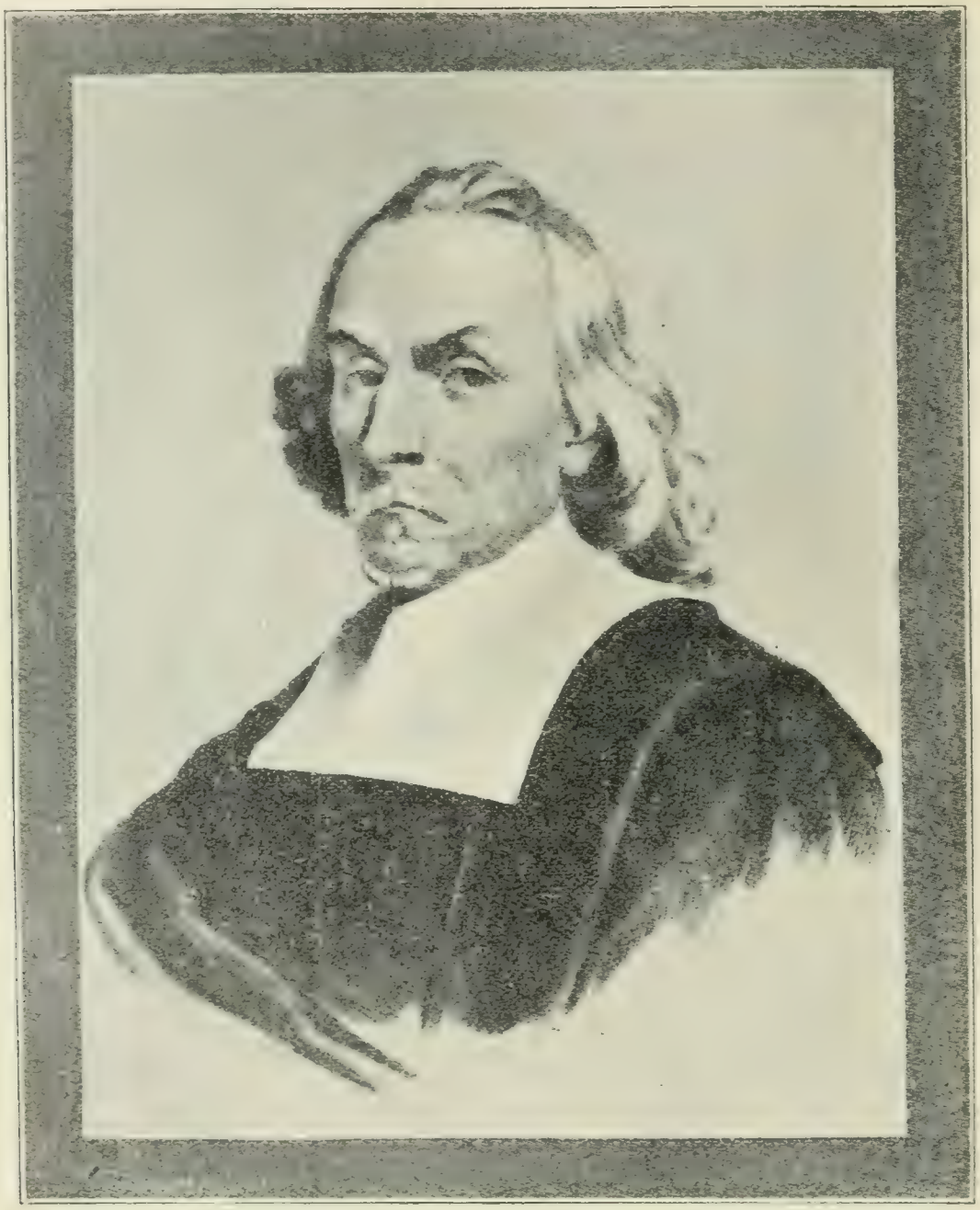
MASTER-MINDS OF MEDICINE: I—WILLIAM HARVEY (1578-1657), DISCOVERER OF THE CIRCULATION.

By Dr. William J. Fischer, Waterloo, Ont.
Author of *Songs by the Wayside*.

"My trust is in my love of truth and the candour of cultivated minds."—*William Harvey.*

The foundation for modern medicine was lain when William Harvey discovered the circulation of the blood through the human heart. This was away back in the seventeenth century, but it gave the builders of science something to work upon. Two books—epoch-making in their importance—stand to the credit of Harvey, the Englishman, who besides holding many important offices in his day, was also physician to His Majesty, King Charles I. They are "De Circulatione Sanguinis" and "De Generatione," and, simple as they read to-day, they contain the fundamental truths on the circulation of the blood and development, as worked out by a man, through long, weary years of research, at a time when medicine and science ebbed low and England herself was disturbed by the convulsions of internal strife and war.

Harvey is looked upon as the first great discoverer in physiology—a branch that tends so much to the perfection of medicine—and even to-day, men—great, living, intellectual giants—point to him as a prince among physicians and repeat his simple truths



WILLIAM HARVEY

DISCOVERER OF THE CIRCULATION OF BLOOD THROUGH THE HEART

"William Harvey is looked upon as the first great discoverer in physiology—a branch that tends so much to the perfection of medicine—and even to-day, men—great, living, intellectual giants—point to him as a prince among physicians, and repeat his simple truths, strong and convincing."

strong and convincing. "Harvey's memory remains," writes one, "and needs neither bricks and mortar, nor pictures, nor a statue, to perpetuate it." It was he who first set his finger upon the heart and its vessels—studied, dissected and experimented upon them until he realized the important truth that was to be told to the world, and his name will be remembered just as long as there are hearts that burn with love, just as long as human lives spend their energies in the mighty battle of existence.

William Harvey, born at Folkstone, April 1, 1578, was the son of one Thomas Harvey,—"the eldest of a week of sons," as Fuller expresses it, "whereof this William was bred to learning his other brethren being bound apprentices in London, and all at last ended in effect in merchants." His father was an intelligent man and was alderman and mayor, at one time or another, of his native town. Of his mother, Joan Harvey, little is known. In the parish church at Folkstone, England, a brass tablet bears the following inscription, which will give the reader an idea of the mother of this distinguished son :

"A.D. 1605. Nov. 8. died in the 55th yeare of her age
Joan, wife of Tho. Harvey. Mother of 7 sones & 2 daughters
A Godly, harmless Woman. A chaste loveinge wife ;
A charitable quiet neighbor ; a cofortable friendly Matron
A provident diligent Huswyfe. A careful teder-hearted Mother
Deere to her Husband : Reverend of her Children :
Beloved of her neighbors : Elected of God.
Whose Soule rest in Heaven, her body in this Grave :
To her a Happy Advantage—to Hers an Unhappy Loss."

Nothing is known of Harvey's first years except that he attended the schools of his town, studying Latin principally. It was about this time the "Spanish Armada" tried to make a little bit of history for the world, and even in Harvey's own town, closely allied with the Cinque Ports, there was much bustle and excitement. This same year, 1588, the young lad entered King's School, Canterbury, where he remained for five years. Then followed a course at Caius College, Cambridge—founded by Dr. Caius, an eminent authority on Greek. Caius is also said to have been the first to introduce the study of practical anatomy into England. In 1597, Harvey received his Bachelor of Arts degree from Caius College, having made a special study of Latin, Greek and physics. His medical education, however, was to begin only now. The following year he travelled through Germany, France and Italy. Italy was in her palmy days then, and was noted for the strength of her several universities. Pisa, Pavia, Padua and Bologna were doing colossal work. Harvey chose Padua, the brilliant Catholic centre, as his Alma Mater, and in 1598 entered upon a thorough training. Vesalius, the anatomist, Fabricius, the eminent historian of medicine, and Dr. Caius, at one time lecturer of Greek at Padua,

had done much by their original work to make Padua famous. The student days of this era had a touch of romance and beauty about them. Many queer customs had been handed down from year to year. A great number were in time abolished. "One, however, remained," writes one, "which allowed the students to tear the clothes from the back of the newly elected rector, who was then called upon to redeem the pieces at an exorbitant rate."

The rector of Padua in Harvey's time was Hieronymus Fabricius—a man of wonderful mind. The medical session always began on St. Luke's day. First there was an oration on medicine, then came solemn High Mass, and then the Litany of the Holy Ghost. The students often had to rise quite early for it was a common thing to have lectures at daybreak. The theatre in which Fabricius lectured stands to this day. It is said "the seats are nearly black with age and give a most venerable appearance to the small apartment, which is wainscoted with curiously carved oak. The lectures must have been given by candle-light, for the building is so constructed that no daylight can be admitted."

Fabricius and Harvey soon became great friends. Fabricius, the master, was then sixty-one. His whole mind was taken up with his studies of the valves of the veins, upon which the miser, Sylvius of Louvilly (1478-1555), had previously done much original work.

In 1602 Padua gave Harvey the degree of Doctor of Medicine. The diploma read that "he (Harvey) had conducted himself so wonderfully well in the examination and had shown such skill, memory and learning that he had far surpassed even the great hopes which his examiners had formed of him. They decided, therefore, that he was skilful, expert and most efficiently qualified both in arts and medicine, and to this they put their hands unanimously, willingly, with complete agreement and unhesitatingly." Could a diploma have been couched in more promising, more eulogistic terms? No wonder, then, that the young doctor of twenty-four easily obtained the degree of M.D. from Cambridge the year following. In 1604 Harvey became a member of the College of Physicians—the most noted body of medical men at that time. The same year, he married Elizabeth Browne, daughter of Dr. Browne, who was physician to Queen Elizabeth and James I. Absolutely nothing is known of Mrs. Harvey. We know, however, that there were no children to bless the marriage.

Harvey spent the first years in London, practising his profession. He did much original work, however, studying the anatomy of all animals. In 1607 he was chosen a Fellow of the College of Physicians. Shortly after came the appointment of attending physician to the poor of St. Bartholomew's Hospital. The charge read in part:

"You shall not for favour, lucre, or gain, appoint or write anything for the poor but such good and wholesome things as you shall think with your best advice will do the poor good, without any affection or respect to be had to the apothecary. And you shall take no gift or reward of any of the poor of this house for your counsel. This you will promise to do as you shall answer before God, and as it becometh a faithful physician, whom you chiefly ought to serve in this vocation, is by God called unto, and for your negligence herein, if you fail, you shall render account. And so we require you faithfully to promise in God, His most Holy name, to perform this your charge in the hearing of us, with your best endeavor as God shall enable you, so long as you shall be physician to the poor of this hospital."

"As physician," writes Dr. Norman Moore, "Harvey sat once a week at a table in the hall of the hospital, and the patients, who were brought to him, sat side by side on a settle—the apothecary, the steward, and the matron standing by whilst he wrote his prescription in a book, which was always kept locked.

Great strides were now being made in England in the study of anatomy. Everywhere lectures were being given and dissections made. In 1581, Lord Lumley and Dr. Caldwell established the famous Lumleian lectures at the College of Physicians. The lecturer, who was appointed for life, was to be a man high up in the profession and was, in turn, to receive a good fee for his bi-weekly lectures on Wednesdays and Fridays. For the first three-quarters of an hour the lecturer held forth in Latin; then followed fifteen minutes in English. The tables of Horatius Morus, the works of Galen, Paulus Ægineta, Oribasius, Holerius and others were touched upon. In 1615 the Lumleian lectureship was accepted by William Harvey, then thirty-seven years old, and he held it for the next forty-one years, when it fell into the hands of his friend, Sir Charles Scarborough. A writer gives us the following interesting picture of Harvey in these days when he held forth in the theatre of the College of Physicians, surrounded by the anxious, intelligent student-body: "He was a man of the lowest stature, round-faced, with a complexion like the wainscot; his eyes small, round, very black and full of spirit; his hair as black as a raven, and curling; rapid in his utterance, choleric, given to gesture, and used, when in discourse with any one, to play unconsciously with the handle of the small dagger he wore at his side."

Harvey has the distinction, also, of having been a very poor and miserable writer. No one to-day can decipher the strange lines of his manuscripts—perhaps he himself would be puzzled. The manuscripts of his first Lumleian lectures—the title pages of which are in red ink—are now in the British museum and are quite a curiosity. Much of the writing is in Latin. Harvey was a great Latin and English scholar, and conversed and wrote as freely in one as in the other. Often he would combine sentences, partly Latin and partly English, for example: "Exempto corde, frogg scipp, eele crawle, dogg ambulat.' Then, again, he would

let his fancies stray and give us something really beautiful and poetic—for instance:

"An cerebrum rex,
Nervi magistratus,
Ramuli nervorum officialis,
Musculi cives, populus."

(Whether the brain is to be looked upon as king, the nerves as his ministers, and the branches of the nerves as their subordinates, while the muscles are the burgesses or the commonality.)

All his life Harvey remained a close student and a friend of books—those silent ones who carried in their hearts the gold of centuries. In a letter, thanking a friend for a copy of Lucretius' account of the plague, he says: "Nor need you plead in excuse your advanced life. I myself, though verging on my eightieth year and sorely failed in bodily health, nevertheless feel my mind still vigorous, so that I continue to give myself up to studies of this kind, especially connected with the sacred things of Apollo, for I do indeed rejoice to see learned men everywhere illustrating the republic of letters."

The lecturer in anatomy in Harvey's days, besides being great intellectually, was also looked upon as a person of very great importance. He held the respect and gratitude of the student-body. Orders were given to those in charge that they were "to see and provide that there be every year a mat about the hearth in the hall, that Mr. Doctor be made not to take cold upon his feet. . . ." How thoughtful! It was in his Lumleian lectures that Harvey first mentioned his discovery of the circulation, though he had almost completed it years before. In 1628, however, his book on the circulation was first given to the world. Published at Frankfort-on-the-Main, it soon attracted wide attention. The book was dedicated to His Majesty, King Charles I. We quote below his own version of the discovery, as given in his memorable treatise. These were the simple lines that startled the world; these were the simple truths that meant so much for later, newer and fuller developments. "It is plain, from the structure of the heart," Harvey goes on, "that the blood is passed continuously through the lungs to the aorta, as by the two clacks of a water-bellows to raise water.

"It is shown by the application of a ligature that the passage of the blood is from the arteries into the veins. Whence it follows that the movement of the blood is constantly in a circle, and is brought about by the beat of the heart. It is a question, therefore, whether this is for the sake of nourishment or rather for the preservation of the blood and the limbs by the communication of heat, the blood cooled by warming the limbs being in turn warmed by the heart."

Harvey's discovery disturbed many scientific minds. Some believed and praised the theory; others ridiculed it. Some even went so far as to cry out that Harvey was insane. He himself tells us that, as a result of his announcement, "he fell mightily in his practice." Parisanus viciously attacked the doctrine, but he was silenced by Dr. Ent—a close and true friend of Harvey and an alumnus of Padua. Caspar Hofmann, of Nuremberg, was also among the dissatisfied ones. Harvey's theory held forth no attractions to him. Harvey himself went to Nuremberg to clear himself and demonstrate his discovery. "He (Hofmann) impeached," writes Harvey, "and condemned Nature of folly and error, and imputed to her the character of a most clumsy and inefficient artificer in suffering the blood to become recrudescent, and making it return again and again to the heart in order to be reconcocted, only to grow effete again in the arterial system; thus uselessly spoiling the perfectly made blood merely to find her something to do." The public demonstration took place at Nuremberg, and many German scientists were convinced by Harvey that day. Hofmann alone remained stubborn. All Harvey's proofs and arguments could not move that rock out of its place. Hofmann kept on with his objections and ridicule for some time. Harvey could stand it no longer. Angry and excited, he threw down his knife and left the amphitheatre in disgust. Another troublesome contemporary was Alexander Reid, of the College of Physicians—a lecturer in anatomy. Both he and Harvey lectured at the same time—each propounding different theories; that of Reid, insipid, nonsensical, that of Harvey, simple, clear and convincing. Reid was obdurate and would not accept Harvey's explanations, but, from year to year, printed his own text-books, containing his own conflicting ideas, and circulated them among his students.

But all this adverse criticism had little or no effect upon Harvey, the most noted man of his time. True, he had fallen into some slight errors, but the framework of Truth was there, raised up by the work of years, and no arguments of a Hofmann, a Reid or a Parisanus were strong enough to pull it to the ground. "Scarce a day, scarce an hour has passed since the birthday of the circulation of the blood," writes Harvey, "that I have not heard something, for good or for evil, said of this, my discovery. Some abuse it is a feeble infant and yet unworthy to have seen the light; others, again, think the bantling deserves to be cherished and cared for. . . . Detractors, mummers, and writers defiled with abuse, so I resolved with myself never to read them, satisfied that anything solid or excellent, nothing but foul terms was to be expected from them, so have I held them still less worthy of an answer. Let them consume on their own ill-nature. They will scarcely find many well-disposed readers, I imagine, nor does God give that which is most excellent and chiefly to be desired—wisdom

—to the wicked. Let them go on railing, I say, until they are weary, if not ashamed."

Harvey's days at the college and at St. Bartholomew's passed by peacefully and, in time, success led him into a well-paying practice. Soon another honor fell upon his well-deserving shoulders. On February 3, 1618. he was appointed physician extraordinary to James I. Later on, a like honor came to him during the reign of Charles I. Harvey had, furthermore, an introduction into the homes of the most distinguished nobles and prelates of his time. Lord Chancellor Bacon, the philosopher—a confirmed neurasthenic—was a patient of his. Harvey evidently was not an admirer of Bacon's literary output or he would not have said: "He writes philosophy like a Lord Chancellor."

In 1629, the king appointed Harvey to accompany the Duke of Lennox—an invalid—abroad. Since his return from Padua Harvey had never left England, and the offer came, therefore, as a delightful change to the busy physician. In 1639, Charles I. appointed him his physician in ordinary at £400 a year, with a residence at the royal palace—Whitehall. "Harvey," writes D'Arcy Power, "became the personal friend of his king; he accompanied him everywhere and consequently took a share in the hunting excursions to which His Majesty was so devoted."

When the civil war broke out, Dr. Harvey was commanded to attend His Majesty on his tour in Scotland. Harvey was an eyewitness to many of the struggles of that day. At the battle of Edgehill, Harvey had in his keeping the two princes—boys of twelve and ten years—who afterwards became Charles II. and James II. When the battle was raging its fiercest, Harvey was there, treating the wounded. Anthony Wood, in his account of Adrian Scrope, says: "This most valiant person, who was son of Sir Jervais Scrope, did most loyally attend His Majesty at the fight of Edgehill, where, receiving several wounds, he was stripped and left among the dead as a dead person there, but brought off by his son and recovered by the immortal Dr. Will. Harvey, who was there, but withdrawn under a hedge with the Prince and Duke, while the battle was at its height."

Harvey was thought by many to have been a rabid Royalist and, on one occasion during these stormy days, a mob of frenzied soldiers and citizens entered his room, plundered the contents, and destroyed and scattered many valuable manuscripts. "He had made," writes Aubrey, a contemporary writer, "dissections of frogs, toads, a number of animals, and had curious observations upon them." Harvey felt badly over the loss of these hard-earned treasures; all his years of hard work were imprisoned in those missing papers. No wonder, then, that his heart was filled with a thousand regrets. "Let gentle minds forgive me," he writes sorrowfully, "if, recalling the irreparable injuries I have suffered, I

here give vent to a sigh. This is the cause of my sorrow—whilst in attendance on His Majesty the King during our late troubles, and more than civil wars, not only with the permission, but by the command of Parliament, certain rapacious hands not only stripped my house of all its furniture but, what is a subject of far greater regret to me, my enemies abstracted from my museum the fruits of many years of toil. Whence it has come to pass that many observations, particularly on the generation of insects, have perished with detriment, I venture to say, to the republic of letters."

When the conflict in Scotland was over, Harvey accompanied the king to Oxford. The sound of war was still in the air, but it did not disturb Harvey. He settled down to work with increased vigor. Aubrey first saw Harvey in Oxford "in 1642 after the Edgehill fight, but I was then too young," he writes, "to be acquainted with so great a doctor." In 1642 Oxford declared Harvey a "Doctor of Physic." The following year he retired from all active duty at St. Bartholomew's. Harvey loved the strong, healthy atmosphere of Oxford and it braced him into unusual activities. In 1645 he was elected Warden of Merton College. The conflict was still raging. Then came the battle of Naseby and a crushing defeat for the Royal cause. All this had a very deleterious effect upon the seats of learning, but Harvey still continued to draw men towards Oxford by his brilliant scholarship, among them, Charles Scarborough, the first English editor of Euclid, who later on was created a Doctor of Physic by the university. The two soon became great friends, and when Oxford surrendered in 1645 Harvey returned to London. Afterwards Scarborough espoused the Royal cause. "Prithee! leave off thy gunning and stay here." Harvey wrote him from London. "I will bring thee into practice." And Harvey, the true friend, kept his word. Through his influence, Scarborough was appointed a lecturer in anatomy, a Fellow of the College of Physicians and, later, physician to Charles II., who knighted him. Later on, again, he was appointed physician also to William III. When on July 28, 1656, Harvey resigned the Lumleian lectureship, the voice of the friend was still in evidence and this great honor also fell upon Scarborough's shoulders, and well was he qualified for the position. In his day Harvey must also have been a surgeon, for in his "will" we read of a bequest to Dr. Scarborough "of all my little silver instruments of surgery." He also bequeathed him his velvet gown. Was friend ever more faithful?

When Harvey left Oxford and returned to London, he practically retired from all active life. One day Dr. Ent—one of his heart's closest friends—called to see him and, in conversation, hinted that the learned world was anxiously waiting for further original work in his own line. "And would you be the man," said Harvey, smiling, "who should recommend me to quit the peaceful haven

where I now pass my life and launch again upon the faithless sea? You know full well what a storm my former lucubrations raised. Much better is it oftentimes to grow wise at home and in private than by publishing what you have amassed with infinite labor, to stir up tempests that may rob you of peace and quiet for the rest of your days."

"True," answered Ent: "it is the usual reward of virtue to have received ill for having merited well. But the winds which raised the storms, like the northwestern blast, which drowns itself in its own rain, have only drawn mischief on themselves."

Harvey was now sixty-eight years old and was much troubled with gout. Not having had any children his life was necessarily a lonely one. Every now and then he would take an excursion into the country to visit some of his dearly beloved brothers. Strange to relate, Harvey was one of the first to use coffee as a drink in England. Long before coffee-houses were opened, he and his brother Eliah had a coffee-pot of their own in constant use. In his "will" even this old coffee-pot was not forgotten. "I give unto my niece Mary West and her daughter Amy West," so it reads, "half the linen I shall leave at London in my chests and chambers, together with all my plate except my coffee-pot." To whom, I wonder, did the coffee-pot go?

Like all great men, Harvey also had his eccentricities. A great-niece of his has said that "his saltcellar was contrarily filled with sugar, which he used to eat instead of salt; he also used to walk out in a morning combing his hair in the fields, and he was humorsome, and would sit down exactly at the time he had appointed for dinner whether the company was come or not."

One of the last generous acts of Harvey was the founding of a library in connection with the College of Physicians. When it was completed a statue of Harvey was placed therein, the great genius being represented in cap and gown, as if he were lecturing.

Shortly before his death he was elected President of the College of Physicians, but he declined the honor on account of failing health. In a letter to Dr. Horst, Hesse-Darmstadt, he hints at his failing health—"I am much pleased," he writes, "to find that in spite of the long time that has passed and the distance that separates us, you have not yet lost me from your memory, and I could wish that it lay in my power to anwser all your inquiries. But, indeed, my age does not permit me to have this pleasure, for I am not only far stricken in years but am afflicted with more and more indifferent health."

But even in those last days his mind was still active. All day he sat with his books, and he was happy. Just before his death he was working out problems in Oughtred's "Clavis Mathematics."

On June 3, 1657, in the house of his brother Eliah, the white

messenger stole into the room of William Harvey—great man of the world—and closed his eyes forever. Apoplexy had come upon him suddenly in the morning, and at night the struggle was over. His body was brought to London where it remained until June twenty-sixth, when, amidst a great concourse of sorrowing friends, it was borne away to Hempstead, in Essex—about fifty miles from old London—and laid away forever in the Harvey chapel, which his brother, Eliah, had erected two years previously.

INVOCATION TO HIPPOCRATES.

By J. S. Sprague, M.D.

Our father in medicine, O Divine Hippocrates! thou of the Æsclepiadae, who, before all others in our literature, doth stand alone in excellency. Thy name is in all nations equally venerated as by us. May thy name be ever thus sanctified, and may thy rulings, even thy medical kingdom which thou foresaw, and now seest in Coelo, be that of those times, on earth. May such rulings come, and the dicisions of thy exalted spirit come, and thy will even be done; for we, leaderless lambs, are at the mercy—the unrelenting mercy—of the patent medicine man. We pray thee to lead us no longer into grievous and thoughtless temptations, and if ever, even now deliver us from evil—the same evils. *Eth-pharmacal*, or made-for-the-doctor-at-the-front-door and at the back-door-for-the-dear-people, preparations. Food, ordinary bread—pabulum diurnalis—give to us. Such is *quenet, est suf*, for we know (hence these tears) that the Eth-pharm Co. is getting all the cake—cream—and wine. In temptationem nos ne inducas—patre medicinal. Do not drag us further into the serbonian bog, whither professors (non-pardonable) and country doctors (now and then fully pardonable), not knowing ethics and foolish enough to believe the professors' stories in journals, have led us. Do now deliver us, deliver us from such evils and the Hydra—if ever, now. For not only are such so-called companies debasing medical literature; the fair name of medicine; but robbing us of our hard-earned shekels. Yes, even at this imprecation are revisions being made in national pharmacopogas, in which such companies, in several instances, are urging, through the revisers, a fixed insertion of their *patent* compounds. Are we, who are thy disciples, faithful, and *inter homines eruditissimi*, adoring thee, thou venerable shade of the glory of Athens. Thou of Co.'s—are we to abandon the B.P. and the U.S.P. for the price lists of the Pharm Co. and the patent medicine almanac? If so, so direct—then we abandon *Mat., Med.*, and *Pharm.* The *price list* and *its compounds* need not have the *stamp* of

the public analyst either. We thrice imprecate thee, thou harbinger of health to the once plague-stricken city, Athens, watered by the murmuring waters of Ilissus and Cephissus, to purify with equal celerity the temples of medicine—libera nos e malis in nostris temporibus, for the *odd and even* named Proprietary Compound manufacturers are shaking the pillars of thy temples—and making slaves of us, thy disciples—not least, free medical journalism—from non-official preparations and the marks of the fakir—so that thy name and our own names be not too unredeemably disgraced among men. The people deceived and we, too, impoverished—and the glory to thee we give.

BANQUET TO DR. CHARLES O'REILLY.

Dr. Charles O'Reilly, former Superintendent of the Toronto General Hospital, was made the recipient of a testimonial, June 10th, when a hundred or more of his professional companions, and other friends, tendered him a banquet at the Albany Club. Dr. Adam Wright presided, and beside him were seated the guest of the evening and the Hon. J. J. Foy, Attorney-General of the Province. Others present were Dr. L. H. Barker, successor to Dr. Wm. Osler in the Chair of Medicine in the Johns Hopkins Hospital, Baltimore; Dr. Thomas Cullen, Professor of Obstetrics in the same University—both graduates of the University of Toronto; Drs. W. H. B. Aikins, Duncan Anderson, H. B. Anderson, Allen Baines, William Barnhardt, Mr. S. T. Bastedo, Drs. N. H. Beemer (Mimico), G. A. Bingham, C. Bird (Gananoque), E. J. Barrick, Wm. Britton, G. G. Boyd, H. A. Bruce, G. H. Burnham, W. P. Caven, Graham Chambers, G. S. Clelland, E. K. Cullen, J. M. Cotton, W. G. Collison (Lindsay), Mr. C. Cockshutt, Drs. J. L. Davison, C. R. Dickson, P. E. Doolittle, G. Elliott, J. E. Elliott, F. Fenton, J. Ferguson, G. H. Field (Cobourg), J. T. Fotheringham, J. S. A. Graham, F. L. M. Grasett, J. B. Gullen, H. J. Hamilton, A. J. Harrington, A. O. Hastings, C. J. O. Hastings, W. B. Hendry, Mr. J. H. Horsey, Drs. R. M. Hillary (Aurora), H. S. Hutchison, C. Hodgetts, Samuel Johnston, A. J. Johnson, John S. King, Mr. Cecil King, Drs. A. A. Macdonald, T. B. Macdonald, G. R. McDonagh, H. A. McCullough, W. J. McCollum, D. N. Maclennan, D. McGillivray, Murray McFarlane, K. C. McIlwraith, Mr. John Massey, Drs. C. F. Murray, T. H. Middleborough (Owen Sound), R. T. Noble, Brefney O'Reilly, Gerald O'Reilly, H. C. Parsons, W. T. Parke (Woodstock), S. G. Peaker, W. H. Pepler, A. Primrose, R. A. Reeve, J. F. W. Ross, B. L. Riordan, J. W. Rountree, R. L.

Stewart, S. Singer, E. W. Sprague, R. W. Bruce Smith, G. Silverthorn, G. B. Smith, J. A. Temple, Chas. Trow, T. S. Webster, T. Wylie, D. J. G. Wishart and Messrs. D. R. Wilkie and W. A. Wilson,

DR. CHARLES O'REILLY
For over twenty-nine years Superintendent of Toronto General Hospital.

After the toast of the King, the Chairman proposed the toast of Dr. O'Reilly's only son, Dr. Brefney O'Reilly, who, in replying, expressed himself as being deeply sensitive of the kindness and good-feeling shown to his father. Dr. J. F. W. Ross, in proposing

the health of Dr. Gerald O'Reilly, brother of Dr. Charles, said no man had done more to promote good feeling among the members of the profession than their guest.

Speaking to the guest of the evening, Dr. John S. King said :

"I am indeed happy at this eventful period in the life of Dr. Chas. O'Reilly, to be permitted to give expression to a few of the many thoughts evolving regarding him ; and to call up some of the reminiscences of him who has been my earliest preceptor—my Æsculapius—my friend.

"The birth of this fair Dominion on the 1st day of July, 1867, was marked by much rejoicing, and the inauguration of Dr. O'Reilly as Medical Superintendent of the Hamilton Hospital. At the time I entered the Hospital, a couple of years later, the Medical Superintendent organized a clinical class, and a junior medical and surgical house staff. Both class and staff were composed that summer of myself. Dr. O'Reilly at once became my preceptor, and few, indeed, there be among preceptors as painstaking in imparting practical knowledge, not only in his clinical work, but in the detailed instruction as to the wound dressing, bandaging, making fracture splints, compounding medicines, and everything connected with hospital work. He was himself a genius at making new and original devices for all manner of purposes.

"His exemplification of treatment of obstinate cases was most original and effective, as may be illustrated by one case, if I may be permitted by the Doctor to speak of it. It was a case of persistent hysteria, which had for nearly two years baffled the skill of the older physicians. The woman remained constantly in bed, and vowed she was unable to use her limbs. One day he was seen running into her ward with a pail of water, crying, 'Fire! fire!' and, stripping down the sheets, told the woman the place was on fire and to escape for her life, at the same moment emptying the water over her prostrate form. The application was sudden ; so was her exit from the bed, and she made good speed into the corridor. She was cured.

"Another circumstance, which was somewhat exceptional even at that early period of the Doctor's experience. I may mention as characteristic of the man, was that of the amputation of the foot and lower third of the leg without the use of an anesthetic. The patient was himself a doctor, who objected to chloroform for personal reasons. This long antedated the Oslerized chloroform age limit. Preparations for the operation were effected by first filling a box with stone, to the lid of which box the limb was securely strapped. The patient, meanwhile, was seated in a chair adjacent to the box, and braced his courage with a goblet of what was known in those days as 'Old 40 Rod,' and smoked a pipe of tobacco. The O'Reilly bandage—now called Esmarch's bandage—

was employed to empty the limb of blood. The bandage was previously saturated with oxide of hydrogen. It will thus appear that the antiseptic treatment was unique, and besides being cheap, was always on tap. Result, a bloodless amputation, satisfactory and complete. The amputated portion was preserved in a cool place until the recovery of the patient, when, with the help of my preceptor, the doctor dissected his own foot to decide what were the remote and proximate causes of the trouble.

"Another matter that differed then from now was the absence of fear from contagion. It was the custom of the preceptor and his pupil to go the rounds daily of the medical, surgical and small-pox wards, the latter patients occupying the old frame building on the grounds at the rear of the brick building. One diagnostic feature of the smallpox cases, as pointed out by my preceptor in his clinic to me, and which was verified in repeated cases, and which permanently impressed me with its value, was that this most disgusting contagious disease gave rise to a most fragrant and agreeable odor when the nose was brought near the pustules, which odor most nearly resembled that of the contents of a freshly-broken bumblebees' honey-comb in the meadow in the summer time.

"Hours might easily be occupied in outlining interesting events of our friend's career, but time forbids, though I cannot refrain from citing one which might have prevented the possibility of this social gathering. Be it remembered that at the times alluded to our friend was a blushing bachelor; and, being the disciple of this Æsculapius, and as such his friend, I occasionally accompanied him in his voyage to the northern shore of the most beautiful bay called Burlington, where resided a worthy lady destined to become, as she since became and continues, a partner in his joys and sorrows. On the particular occasion to which I refer, his call was prolonged well into the evening—and so was mine at the Beach—which evening proved to be one of the darkest I ever remember. After my long wait I saw my preceptor's near approach, and found him equally anxious with myself, owing to the rapid approach of a threatening storm. By the aid of the electric flashlights we started our row-boat in the direction of the hospital on the opposite shore of the bay. Æsculapius sat at the helm and his disciple plied the oars. When well on our way the storm broke into violence and fury. Heaven's artillery roared and electric pyrotechnics at swift following intervals enabled the helmsman to guide the tiny boat over the vast billows, which were rolling higher and higher every minute. We two mortals felt our time had come, and expected every moment to sink to a watery grave. Had it not been for his good judgment and discernment and correct work at the helm I would not have been able to tell you anything of the Doctor's early career; and if I had not made

the most strenuous efforts at the oars till the shore was reached, you would not have had our mutual friend as guest here to-night; and free I am to confess before you all, and in which confession I doubt not he will join—that the joint toiling of each for both, and both for each, proved a bond of friendship never yet broken; and Heaven forbid that it should ever be. We landed safely as you see, though fear turned my hairs to gray, and drove crimson blood into his, thus giving me the appearance of age, and him of youth, which, as you all must know, is a reverse of the true condition. This condition of his will be in his favor in seeking to avoid the chloroform age. But of reminiscence and of humor enough.

"Environment contributes greatly to education, and is a most important factor in the formation of character; and the aggregate of the diversified environment to which our friend was related during a period of over one-third of a century as Medical Superintendent, first of the Hamilton Hospital, where his natural qualifications, scholastic attainment, practical experience and professional lore had marked him a most suitable man to assume the responsibilities of a similar but more onerous position to which he was called, namely, that of Medical Superintendent of the largest hospital in the Province, in the Queen City of Toronto. The varied environments in the latter position during a period of thirty years must have occasioned a crucial test of strength of will, power of self-possession, of self-abnegation, resolution of purpose, and other attributes of a strong, well-balanced mind so necessary in one having to consider the varied interests of the trustees, the profession, the patients, the staff and the public. That he met their expectations, and merited their fullest confidence and appreciation, has been or is being proved in a marked degree.

"As the composite picture or aggregate of impressions of the several artists produces the true physiognomy and cranial form of the individual, marking well each characteristic, so the constantly occurring, extensive, yet varied impressions received from the wise, experienced, skilled, cultured and fraternal in the medical and surgical world of the Province, continuous over more than one generation of time, must have created the ideal, composite, representative Doctor.

"And such ideal, permit me to say, in my humble judgment, is personified in the mentality, individuality, and professional lore of him whom we to-night in a social way seek to honor as our friend.

"As he now withdraws from the activities of a long-filled official position to enjoy a season of rest and enjoyment, he will carry with him our friendship and our best wishes that the afternoon of his life may, like the later, leafy days of June, be long, bright and cheerful."

Hon. Mr. Foy, in a brief address, said he had known Dr.

O'Reilly very intimately for many years, of which he had none but pleasant memories.

Mr. D. R. Wilkie expressed himself as being glad of the opportunity of being present, and paid a high tribute to Dr. O'Reilly's personal worth and administrative abilities.

Dr. Thomas Cullen appreciated very much the privilege of responding for the house staff. He looked upon Dr. O'Reilly as his medical father, and referred to his lovable personal qualities and his distinguished abilities.

Dr. J. Algernon Temple proposed the health of the guest of the evening. He thought the honor was conferred upon him because he was perhaps the oldest friend Dr. O'Reilly had present in the room, their intimacy having extended over forty years. He compared the hospital of that period with the well-equipped hospital of to-day, and spoke of what Dr. O'Reilly had done to advance the interest of the profession and of the young men who had had the good fortune to serve under him.

Dr. Allen Baines then read an address expressing regret at the resignation of Dr. O'Reilly and asking the acceptance of some pieces of plate as a very slight token of good-will. On behalf of the subscribers, the address was signed by J. Algernon Temple, Allen Baines, H. J. Hamilton, J. O. Orr, A. H. Wright, W. H. B. Aikins, Bruce L. Riordan, James F. W. Ross and Samuel Johnston.

Dr. Barker, of Baltimore, was then called upon. He looked back with pleasure to his year on the house staff of the Toronto General Hospital, and remembered with much appreciation the great kindness which Dr. O'Reilly had shown to himself and the other members of the house staff. He was sure every man who had ever served in the Toronto General Hospital felt a deep sense of gratitude to Dr. O'Reilly for his unvarying kindness.

Dr. Adam Wright presented the solid silver gift, and read a telegram of regret for absence from the Hon. Senator Sullivan, of Kingston. "Toronto Hospital," he wired, "was a monument of Dr. O'Reilly's reforming genius and love of humanity."

Dr. O'Reilly received a perfect ovation on rising to respond. He thanked all present for the magnificent banquet, and the absentees for their cables, wires, letters and messages, and was glad to see so many of his ex-house staff present. He had come to Toronto on January 1st, 1876, at the request of the Board, all of whom—C. S. Ross (Chairman), W. T. O'Reilly, Thomas McCrosson, Wm. Elliott and W. H. Howland—have since slipped away. Judge Patterson and Walter S. Lee had also joined the great majority. The medical staff then consisted of Drs. W. T. Aikins, H. H. Wright, Bethune, Hodder, Graham, Thorburn, Geikie, Richardson, Cartwright, Cassidy, Reeve and Temple. The last five were all alive, and some of them present.

"I was at Dr. Hodder's last operation and at Dr. Grasett's first

operation, he being the youngest surgeon on the staff at that time, and glad I am to see him here to-night as senior surgeon of the hospital. My first two house surgeons were Drs. Fisher and McArton, then fourth-year students, and my two first graduates were Dr. Langstaff and Dr. Stark, both alive to-day. I cannot be accused of being a 'rolling stone,' as I have only lived, in all my life, in my father's house and in the hospitals of Hamilton and Toronto.

"I am not saying good-bye, but only good-day, and may we all have many happy years. Let us keep young by associating with each other oftener than we do, and with the younger members of the profession like ourselves, for the vitality of youth is very contagious, and will carry us over the chloroform period. The very idea of knowing that I am surrounded by over a hundred friends to-night makes it hard indeed for me to put into words the feelings which I should like to express. I shall conclude by saying how sincerely Mrs. O'Reilly, my son and myself appreciate this magnificent ovation, your expressions of kindly feeling and your handsome present, and by thanking you for all you have done and said for 'me and mine.'"

Clinical Department.

Foreign Body in the Trachea. L. P. POLLMANN, M.D., St., Louis, in *Inter-State Medical Journal.*

About three weeks ago Dr. J. F. V. Krebs and myself were hurriedly called to see a little boy of two years, who, while seated at the table and amusing himself with buttons, pins, and sundry articles, was suddenly seized with an attack of choking. The mother stated that while in a room adjoining she heard the child scream, and rushing to its assistance, found it very much agitated, cyanotic and breathing heavily.

The little chap having enjoyed perfect health up to this very moment, and no throat disease being discernible, the natural presumption was that some obstructing agent must have entered the air passages from without, and it was probably to be found in one of the various playthings the child had been toying with at the table.

The gravity of the condition was explained to the mother, and immediately operation advised, which was readily accepted. A tracheotomy above the isthmus of the thyroid gland was done, because it was held that the larynx as well as the trachea would be equally easy of access through an incision in that locality. At the moment the tracheal wound was drawn asunder for subsequent instrumental exploration, a small brass rod shot up into it from below, evidently carried along by the expiratory current. It was easily extracted, and proved to be quite a stout scarf-pin two inches in length, and carrying an ovoid head 7 m.m. in diameter. Free respiration was re-established at once, the mucous membrane of the trachea presenting a normal appearance. The wound was closed immediately and a dressing applied.

Recovery was complete eight days thereafter, when the sutures were removed and the patient discharged.

Considering the large size of the pin's head, the diameter of which corresponded with that of a trachea (lumen, of course), two years old, it is certainly to be wondered at why the obturation of the windpipe did not become complete at the moment of entry of the foreign body and terminate the youngster's life abruptly.

The trachea of the child is frequently found to widen as it approaches the bifurcation, and this factor, in connection with prompt surgical interference, no doubt determined the very gratifying result achieved in our case.

Society Reports--Notes of Interets.

Nux Vomica in Hyperchlorhydria.

At the recent meeting of the Association of American Physicians, Dr. John H. Musser said that where there is an abundance of acid in the stomach, sedatives were generally employed, but these had not proven satisfactory in his experience, but that nux vomica, commencing with fifteen-drop doses three times a day, and gradually increasing until physiologic effects of the drug are being produced, had produced excellent effects. Dr. Tyson confirmed this in all forms of nervous dyspepsia

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Absence of Salt in Epilepsy.

Discussing the absence of salt in epilepsy Dr. Joseph Collins, of New York, before the meeting of the Association of American Physicians, said that in twenty-five cases under observation during the past two years there had been a reduction of the frequency and severity of the attacks amounting to 35 per cent. of improvement. That is to say, these patients were one-third better without salt in their diet than with it, and this Dr. Collins considers one of the most important elements in the treatment of Epilepsy.

Tuberculosis.

Dr. Trudeau, in delivering his presidential address at the National Association for the Study and Prevention of Tuberculosis, said: "The features of incipient tuberculosis must be taught in the medical schools, for the student is apt to think only of advanced cases. The teaching in the Public Schools must be rather with regard to hygiene than tuberculosis itself. There are three classes who need education with regard to tuberculosis, namely, the public, the medical profession and the patient." Said Dr. Osler at the same meeting: "Towards this end the public are now awake, but in this direction there are still three duties—the enactment of good laws, the proper care of early tuberculous cases, the care of the hopeless cases."

Physician's Library.

A Text-Book on the Practice of Gynecology. For Practitioners and Students. By W. EASTERLY ASHTON, M.D., LL.D., Fellow of the American Gynecologic Society; Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Octavo volume of 1,079 pages, containing 1,046 new and entirely original line drawings. Philadelphia and London: W B. Saunders & Company. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. 1905. Cloth, $6.50 net; Half Morocco, $7.50 net.

Dr. Ashton's Practice of Gynecology is a new departure in medical text-book making. The author takes up each procedure step by step, the student being led from one step to another just as in studying any non-medical subject. Nothing is assumed, Dr. Ashton in every instance not only telling what should be done, but also precisely how to do it. All the methods and details of technic described have been thoroughly tested by the author himself, so as to assure their value and accuracy. A very commendable feature is the departure from the old routine method of devoting a general chapter to physical examination. In place of this the author presents the examination of each organ separately before describing its diseases, thus greatly aiding the student in familiarizing himself with the technic. A distinctly original feature consists in the line drawings made especially for this work, under the author's personal supervision, from actual apparatus, living models, dissections on the cadaver, and from the operative technics of other authors. There are ten hundred and forty-six of these illustrations, showing the procedures and operations without obscuring their purpose by unnecessary anatomic surroundings. Definite and precise instructions are given regarding the preservation of specimens of morbid tissues and secretions, and their delivery in good condition to the pathologist. The fore part of the work, dealing with antiseptic technic, shows great care in its preparation, Dr. Ashton wisely describing only those methods which he employs in his own practice, in order that the reader may have a clear and definite conception of the subject. Very special attention has been given to the consideration of visceral injuries, and we know of no other work on gynecology or general surgery discussing this important subject with the same amount of detail. This is decidedly a work for the general practitioner as well as for the student; and a good one.

Saunders' Pocket Medical Formulary. By WILLIAM M. POWELL, M.D., author of "Essentials of Diseases of Children"; Member of Philadelphia Pathological Society. Containing 1,831 formulas from the best known authorities. With an Appendix containing Posological Table, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetrical Table, Diet-list, Materials and Drugs used in Antiseptic Surgery, Treatment of Asphyxia from Drowning, Surgical Remembrancer, Tables of Incompatibles, Eruptive Fevers, etc., etc. Seventh Edition, Revised. In flexible morocco, with side index, wallet and flap. Philadelphia and London: W. B. Saunders & Co. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. $1.75 net.

When a work has reached its seventh edition there can be no doubt of its practical usefulness. And it is not at all surprising to us that Saunders' Pocket Medical Formulary should have attained such popularity, for we know of no similar work containing so much useful, practical, and accurate information in so small a compass. In this new seventh edition there have been added over 460 new and valuable formulas, selected from the works and private practices of the best authorities. The editor has shown rare discretion in the elimination of many obsolete formulas, inserting in their place newer and better ones, embodying a large number of approved new remedies. In its new edition this Formularly is thoroughly representative of the most recent therapeutic methods, and its convenient size and mechanical get-up make it the most desirable work of its kind on the market.

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The Surgical Assistant. A Manual for Students, Practitioners, Hospital Internes and Nurses. By WALTER M. BRICKNER, B.S., M.D., Assistant Surgeon, Mt. Sinai Hospital, Out-Patient Department, etc. 360 pages. 123 original illustrations and 116 illustrations of surgical instruments. New York: The International Journal of Surgery Co. 1905. Price, $2.00 net.

This splendid manual is one of the really important books of the year, in as much as it fills a place in medical literature that has hitherto been unfilled. It certainly meets a wide spread demand

in a highly acceptable manner, and it is sure to attain immediate and lasting popularity.

The book is not too large for the doctor's overcoat pocket, nor the nurse's satchel, yet it covers the entire subject. The first two chapters deal, respectfully, with *the general conduct of the assistant* and *the hospital interne* and contain much practical sense and sound advice for young men to take to heart. Chapter three treats of *assistance in examinations and dressings*, fracture reductions, the manipulation of plaster-of-Paris, etc. Chapter four gives in great detail an illustrated, systematic scheme for *the preparation of an operating room.* Chapter five describes *the immediate preparation of the patient* and of *the assistant himself*, in which the *technique of asepsis* is thoroughly impressed. Chapter six is a very practical article on *the anesthetist.* The two succeeding chapters take up *the preservation and preparation of surgical accessories* and the details of "*instrument handing.*" They are brimful of "wrinkles" and useful hints. Chapter nine describes all the various manipulations concerned in *assistance at the wound*, from the proper manner of holding the hands and body to the method of managing an irrigator tip. A most valuable chapter is the tenth, concerning itself as it does with those important matters that may confront an assistant left to watch a patient just after operation. Vomiting urination, pain, the arrangement of the bed and other numerous details are succinctly dealt with, and a valuable table for differentiation between shock and concealed hemorrhage is incorporated. The management of these and all other emergencies that may arise is given in great detail.

The second part of the book (chapters eleven to twenty-five) deals with the most commonly performed operations, describing them step by step, from the assistant's standpoint. A regional classification is here adopted. With each operation is given a list of the instruments and accessories required, and the manner of preparing them. The complete technique of intravenous infusion is accurately described.

A useful appendix to the work consists in the *preliminary preparation and routine after treatment of operative cases*, the various methods of preparing suture material, iodoform gauze, etc., etc., and a *formulary* of surgical solutions and wound applications, etc. In a second appendix are printed illustrations of general surgical instruments, thus placed to be convenient for reference.

It is a book that no young practitioner should be without, as it will prove of the greatest value to him in his every day work. Likewise it should be in the hands of every nurse and hospital interne. Its use will not only assure greater efficiency in everything pertaining to surgical operations but will prevent all the embarrassing delays and annoyances caused by inexperience or lack of knowledge.

Nothnagel's Practice.—Malaria, Influenza, and Dengue. By DR. J. MANNABERG, of Vienna, and DR. O. LEICHTENSTERN, of Cologne. Entire volume edited, with additions, by RONALD ROSS, F.R.C.S., F.R.S., Professor of Tropical Medicine, University of Liverpool; J. W. W. STEPHENS, M.D., D.P.H., Walter Myers Lecturer in Tropical Medicine, University of Liverpool; and ALBERT S. GRUNBAUM, F.R.C.P., Professor of Experimental Medicine, University of Liverpool. Octavo volume of 769 pages, fully illustrated, including eight full-page plates. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Company, Limited, 434 Yonge St., Toronto. 1905. Cloth, $5.00 net; Half Morocco, $6.00 net.

This new volume in Saunders' American edition of Nothnagel's Practice represents the latest word on the subjects of which it treats. And more than that: It is the undisputed authority on these subjects. For this American edition Dr. Ross has made many additions to the article on malaria, so many discoveries having been made since the appearance of the original article. The articles on the Mosquito and its various relations to Malaria comes from the authoritative pen of Dr. J. W. W. Stephens, of Liverpool. The Influenza and Dengue Sections are equally well written. The untiring labor of the editors in preparing this work for the English speaking market is evidenced on almost every page by the lengthy and valuable editorial interpolations. This is the tenth volume in the series, and the eleventh one (that dealing with Diseases of the Kidneys and Spleen and with Hemorrhagic Diseases) is promised very soon. When the series is completed it will undoubtedly form the best practice of medicine in existence.

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Atlas and Text-Book of Topographic and Applied Anatomy. By PROF. DR. O. SCHULTZE, of Würzburg. Edited, with additions by GEORGE D. STEWART, M.D., Professor of Anatomy and Clinical Surgery, University and Bellevue Hospital Medical College, New York. Large quarto volume of 187 pages, containing 25 figures on 22 colored lithographic plates, and 89 text-cuts, 60 in colors. Philadelphia and London: W. B. Saunders & Co. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1905. Cloth, $5.50 net.

In the preparation of this book Professor Schultze had in mind the need of a work that would combine the features of a text-book

with the educational advantages of an atlas. He has produced a work of great merit, and not alone the anatomist but more particularly the general practitioner will find it of constant value. Professor Schultze has presented his own methods for the study of anatomy—methods proved to be correct and practical by many years of clinical study. Throughout the work the value of the knowledge of topographic anatomy in bedside diagnosis is emphasized. The many colored lithographic plates and the numerous test cuts, sixty of which are in colors, are of exceptional excellence. Indeed, both for accurateness of detail and artistic beauty we have never seen their equal. The greater portion of the dissections from which these illustrations have been made are from the author's own preparations. Dr. George D. Stewart, in editing the work, has added many valuable notes.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only $2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

We have a bright and useful future if the profession will unite and join our ranks.

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COMMENT FROM MONTH TO MONTH.

The Twenty-Fifth Annual Meeting of the Ontario Medical Association, held in Toronto on the 6th, 7th and 8th of June, was one of the best in the history of that strong, provincial organization, now one quarter of a century old. It was, perhaps, the best meeting in the last decade, both from numbers and quality, to say nothing of quantity, of papers. The discussions were also especially animated, interesting, often keen. This was a marked and noticeable feature of the meeting, and is an especially valuable one, as it brings out individual opinions and experiences. There were certain papers along political rather that scientific lines, that is as affects medical matters, in a general sense, and the appointment of committees to prosecute these matters, such as caring for certain acute forms of insanity in special wards or pavilions, of general hospitals, in the interim, shows a progressive spirit and a charitable and unselfish desire, to do all possible on behalf of this class of sick, all too perfunctorily cared for. A particular feature of these annual gatherings is the social side. Medical men, probably more than others, especially those in country practices, tied down all winter with brain-wracking and body-tiring work, when they come

out to these meetings look for and expect a little recreation of a wholesome and relaxing character. They are not all eager to sit for hours at a time, morning, noon and night, listening to the reading of papers and discussions thereon, and now that the Association has attained to the dignity of a quarter of a century of age, and has seen fit to add on another day to compass its annual work, plenty of the social side should be thrown in. Indeed, it would seem that three solid sessions in any one day is too much for the digestive faculties of even a medical man. Then we would respectfully remind chairmen of future committees that there are a whole lot of younger men under forty, who might profitably be put on committees, and not year after year see about the same composition. It is pleasing to know that the Association meeting this year brought out such large numbers from the country, and that the attendance was second best in its history. May it steadily prosper and still further develop.

There is every prospect of a continuance of the large meetings in recent years of the Canadian Medical Association, which this year convenes at Halifax from the 22nd to the 25th of August. A splendid programme has been arranged. The trip down Lake Ontario and through the Thousand Islands, shooting the numerous rapids before reaching Montreal to any who has never taken it, will alone repay for the entire journey. Then there is a boat trip to Pictou, from Montreal—five days. The scenery along the railway lines is exceedingly fine and picturesque; and the meeting is attracting many, owing to the fact that it is over twenty years since the C. M. A. last convened in Halifax. Information is to hand that a large party is going from Winnipeg and Manitoba. Montreal and Toronto will be well represented, and Ontario also promises well. One particular section of the profession in Canada should make a strong effort to be there in a body, namely, the members of the Canadian Medical Protective Association, as the occasion is the annual meeting of that ornanization, now thriving lustily. It is always safe to promise at these meetings that the entertainment will be of a high order, and this year will be no exception to the rule. Can you afford to miss it?

The Board of Trustees of the Toronto General Hospital has advertised for a General Superintendent, lay or medical, in succession to Dr. O'Reilly, and in doing so, has offered a position which, for the next decade, will be an unusually important one to fill. At this time, the hospital requires a very capable officer, and the choice of any other than a man of force and fine administrative ability, may result disastrously. It was told in professional circles before

the 1st of July that the management had had up to that date no less than eighty applicants. This may all be talk from the street, but if true, evinces an unusual eagerness, if not unusual confidence on the part of the applicants that they have taken the measure of themselves, and the office, and find that the fit is perfect. It will as well take the keenest judgment on the part of the hospital management to discriminate. There are very few men in the medical profession who have the necessary business, hospital and professional training to undertake this work, and those who are too eager for the position would very probably make ignominious failures. Let us hope that the hospital management will put its foot down good and hard on the first appearance of any wire-pulling; and that any medical man who endeavors to "work" the Board, who may think he has a pull, will get "good and left." If a medical man is to be selected, the advisory committee should, of their knowledge of the men who are applicants, be able to advise, wisely and strongly. The question of the appointment of a business man seems to us unwise. We are not educated up to that here in Canada yet. Probably the management may after all think it wise and go hunt their man.

The attempt of the opticians of Nova Scotia to obtain incorporation as an examining body from the Legislature of that province, emphasizes the need of general practitioners taking up the work of fitting glasses. It emphasizes, moreover, the need of teaching medical faculties preparing their student and their graduates for and also examining them in this work. When doctors rail at these so-called opticians and object to them prosecuting this work, when they are not prepared to do it themselves, they are rather pursuing a dog-in-the-manger style; for it now must be apparent that people are not going to go to oculists simply because doctors and eye specialists would like them to do so; and it will be a question whether legislators will continue to refuse recognition to these people, when general practitioners fail to qualify and equip themselves for the work. To many druggists the fitting of glasses has proven a profitable side line; and if people cannot be fitted for them in the offices of their family physician, they are going to go to either their druggist, their jeweller, or as in one case, in a western town their veterinary.

Bacteriology has determined that most cases of infectious summer diarrhœa are due to the bacillus dysenteriæ. Practically all the cases of summer diarrhœa may be included (according to Dunn in the *Archives of Pediatrics* for June) under the five following heads. (1) Acute nervous diarrhœa, characterized by loose

stools of normal color and odor, without abnormal constituents; (2) Irritative diarrhœa, acute intestinal indigestion of the irritative type, characterized by the absence of persistent fever, and by the presence of curds and undigested masses in the discharges. (3) Fermental diarrhœa. Acute fermental indigestion of the fermental type, characterized by the absence of fever, and by green stools of a foul or sour odor; (4) Infectious diarrhœa, characterized by the existence and persistence of fever and by the tendency towards early signs of ileo colitis, as shown by the presence of blood, and excess of mucous in the discharges. When a specific organism, the bacillus dysentriæ, is proved to be the cause, the case may be further particularized by the term infantile dysentery; (5) Rare cases occur, corresponding to the known description of heat exhaustion and cholera infantum. Of all these classes, the indigestion type, including the irritative and fermental cases, is the most common.

But the diagnosis is not nearly so difficult as the successful treatment of the patient with one of these forms of summer diarrhœa.

In a subsequent paper Dr. Dunn will deal with treatment in detail, but in all cases it is well to give an initial dose of calomel or castor oil, followed up with twenty-four to forty-eight hours of starvation, and then a very mild, bland weak food. In most cases bismuth may be employed and in some colon irrigation.

Editorial Notes.

The Present Status of the Treatment of Congenital Dislocation of the Hip.—The interest in the treatment of congenital dislocation of the hip, during the past two years, warrants a review of what has been done and a few words as to the present status of treatment.

Until Professor Lorenz, of Vienna, came to this country, in the fall of 1902, no general interest had been shown by the large majority of practitioners or by the laity, although orthopedic surgeons had been studying the subject for many years. Buckminster Brown, of Boston, had faithfully tried recumbent traction. Braces or ambulatory traction had been tested, hips had been reduced by the manipulative procedures advocated by Bigelow, Pacci and Lorenz. The operations of Hoffa, Lorenz and others had been fairly tested. The head of the femur had been nailed to the acetabulum to produce a stiff joint and the head of the femur had been excised, and in some cases the excised bone placed in the acetabular cavity, in others left free.

Although occasional cures by various methods had been reported, the percentage of failures was large and the dangers of some of the manipulative and operative procedures were so great as to deter any but the most experienced in continuing the work.

Lorenz demonstrated that in the hands of skilful operators more force could be used than any other operator had ever dared resort to, and thus some hips were reduced that surgeons had thought could not be reduced. He also showed the advantage of replacing the bone by leverage rather than by traction, and introduced new ideas as to the dressing to be applied after reduction, and the position in which the limb should be placed. No accurate record was kept of the number of operations done by him in this country by his so-called "bloodless method," but it exceeded one hundred. His work was not free from accident. Nor can anyone who will perform many reductions hope to escape from an occasional fracture of the femur in the shaft or in the neck, from an occasional case of paralysis of the leg muscles, or from the more serious complication of gangrene of the lower extremitry, due to tearing the femoral artery or to pressure of the femoral head against the vessel. Two deaths have been reported in America from this complication. The head of the femur has also been forced through the acetabulum and into the perineum. Sepsis is a rare cause of death in the Lorenz method, but serious abscesses have occurred, as the result of bruising of the tissues by the manipulative procedures, and subsequent infection.

With greater experience the accidents are becoming less numerous and the number of cures increasing, and this is largely due to the interest taken by the profession and laity in the subject. The diagnosis is made earlier and the patient presented for treatment at an earlier and more favorable age than was formerly done, as most physicians, until recently, believed the condition incurable.

As no accurate record was kept of the patients operated upon, so no accurate deduction can be made upon the ultimate results of Lorenz's personal work. In a very large majority of the cases an anterior reposition resulted and but in a small percentage was there a true anatomical reposition as proven by X-ray and careful examination by competent observers two years after the reduction. The large percentage of failure to place the femoral head in the acetabular cavity, and retain it there, has resulted in restricting this method to young children, as the accidents occurred in older cases and the percentage of cures was greatest in the young. The age limit is variously placed, but the bloodless operation should probably be restricted to those under six or seven years of age.

This age limit may be increased as the result of the very clever mechanical device now in use at the Children's Hospital, Boston, devised by Mr. Bartlett. It fixes the pelvis during the manipulation, and applies traction to the limb and pressure where needed. It is the best of all such devices that has so far appeared and its use may increase the percentage of successes by the "bloodless method."

The age limit is not the only restriction, cases with much distortion of the neck of the femur do not yield good results, nor will the reduction succeed if there is no femoral head or a faulty and much filled-in acetabular cavity. It is the operation of choice in the very young, but if it is not possible to replace the head of the femur in the acetabulum, or if it does not remain in place, recourse should be had to the operation of Hoffa, which consists in cutting down to the joint, dividing the capsule and any and all obstructing tissues and replacing the head of the bone in the acetabulum, with or without gouging it out or deepening it. The operation is a difficult one, hemorrhage is frequently severe and a thorough knowledge of the technic and the anatomy are necessary. Sepsis is the only complication to be feared. Good results follow the operation in many cases and it is indicated when other measures have failed or where the non-bloody method is contra-indicated.

The report of the orthopedic staff, of the Boston Children's Hospital, on "Congenital Dislocation of the Hip," reprinted from the *Boston Medical and Surgical Journal*, Vol. CLI., states in conclusion, and it is the view of most other observers: "From the experience gained at the Children's Hospital it appears, also, to the writers of this report, that stretching the tissues by an efficient machine gives, in resistant cases, an unquestioned advantage, and

permits better reduction with less risks and in older patients, than if operative manipulation alone is employed.

"There is a certain analogy between the treatment of congenital dislocation of the hip and that of club-foot. In the simpler cases, manipulation under anesthetic is sufficient. In the more resistant cases, correction is helped by mechanical aid; in the oldest and complicated cases incision and osteotomy are often needed to perfect the cure. The present condition of the treatment of congenital dislocation of the hip may seem to illustrate that the world advances by impossibilities achieved. Twenty years ago, cure of this deformity was considered impossible. This, in many cases, is now easily accomplished.

(Sgd.) WISNER R. TOWNSEND, in *Archives of Pediatrics.*

IN the June issue of this journal was published an important and interesting and, at the same time, valuable report, entitled: "A Review of the Anemia Commission upon Hook-Worm Disease in Porto Rico." The Commission used pepto-mangan (Gude) in eighteen cases, selected on account of their extreme severity, and it is gratifying to know that this well-known product stood the test well, and was, in fact, the only proprietary remedy reported by the Commission.

News Items.

CANADIAN.

DR. RADCLIFFE, of Moose Jaw, is visiting in St. Mary's and Stratford.

DR. BOYNTON, Cannington, has left town to open an office in Pefferlaw.

DR. MCNAUGHTON, Brussels, has disposed of his practice and residence to Dr. Burns.

DR. C. W. CLARK and Dr. Gray, of Winnipeg, are visiting in Washington State.

DR. H. C. MCLEAN, of Parry Sound, has been appointed jail surgeon in place of Dr. Appleby.

The Royal Jubilee Hospital, Victoria, B.C., treated 1,058 patients during the past official year.

DR. W. D. BRYDONE-JACK has returned to Vancouver after several weeks at the hospitals of the east.

DR. MACKAY, Cookstown, has decided to move to Toronto in the near future to pursue his profession.

DR. PENNYFATHER, of Holland, Man., will establish a sanitarium for consumptives near that town.

DR. STANDISH has disposed of his practice at Auburn to Dr. Weir. Dr. Standish moves to Georgetown.

DR. WALLACE SOMERS, of Waterford, left a few days ago *via* the lake route for Manitoba and the North-West.

WE regret that Dr. A. E. Burrows, of McKellar, Ont., is leaving us in order to set up a practice in Parry Sound.

DR. T. H. FARRELL, of Utica, N.Y., has donated $500 towards the proposed chair of anatomy in Queen's College.

DR. DUNN, of Beeton, who sold his practice to Dr. Hodgson, of Beaverton, a short time ago, intends going to Edmonton.

DR. R. P. BERRY, of Claremont, Iowa, and formerly of Lindsay, has been appointed President of the Claremont State Bank.

THE National Sanitarium Association has received a gift of $3,500 for the purposes of a cottage at Muskoka Sanitarium.

DR. B. TUGHEN, of Toronto, will practise with Dr. Hutton, Humberstone during the summer. Dr. Tughen is well-known here.

DR. W. J. MCCOLLUM, Toronto, has been appointed an Associate Coroner for the County of York.

DR. GRAHAM CHAMBERS, Toronto, has retired from general practice and will hereafter devote himself to internal medicine and diseases of the skin.

DR. J. R. LE TOUZEL left Goderich last month for Bermuda, en route to Jamaica, after spending several months in town visiting the old home.

CONGRATULATIONS are due to Dr. J. Algernon Temple and to the Hon. Dr. R. A Pyne, Toronto, on the conferring of LL.D. upon both gentlemen by the University of Toronto.

DR. A. E. HARVEY, of Wyoming, died at his home last month in his 64th year. He was one of the oldest practitioners in Lambton County. His death was due to paralysis.

CANADIAN MEDICAL ASSOCIATION.—The annual meeting at Halifax from the 22nd to the 25th of August. Travel on Standard Convention Certificate plan which all get from ticket agents on starting.

DR. ERNEST K. CULLEN, of the Toronto General Hospital house staff, has been appointed fellow in pathology at Johns Hopkins University, at Baltimore. He graduated from Toronto University in 1903.

THE American Association of Genito-Urinary Surgeons met in Montreal on the 13th of May. Two prominent Montreal surgeons are members of this Association, namely Sir William Hingston and Dr. James Bell.

DR. FREEMAN resigned from the Hamilton General Hospital. Dr. Walter Langrill, the Medical Health Officer, was appointed in his place and Dr. Roberts has been appointed to the position of Medical Health Officer.

THE Western Hospital, Montreal, is shortly to commence work on a new wing to have accommodation for 100 patients; another wing will be added later on which will increase the capacity of the hospital to 500 patients.

DR. M. E. GOWLAND will assist Dr. Smith in his practice for the next few months. Dr. Gowland, Barrie, Ont., has had an unusually successful college course, having taken first class honors every year, and was silver medalist in his final. He is also a M.A.

ONTARIO MEDICAL COUNCIL EXAMINERS 1905-1906.—Anatomy, descriptive, Dr. T. W. G. McKay, of Oshawa; theory and practice of medicine, Dr. Geo. Hodge, of London; clinical medicine, Dr. H. R. Duff, of Kingston; midwifery, operative and other than operative, and respiral diseases, Dr. J. R. McCabe, of Strathroy; physiology and histology, Dr. R. D. Rudolf, of Toronto; surgery, operative and other than operative, Dr. W. T. Parke, of Woodstock; clinical sugery, Dr. J. S. McCullough, of Alliston; medical and surgical anatomy, Dr. T. H. Middleboro, of

Owen Sound ; chemistry, theoretical and practical, and toxicology, Dr. A. R. Pyne, of Toronto ; materia medica and pharmacology, Dr. Jas. S. Sprague, of Stirling ; medical jurisprudence and sanitary science, Dr. D. J. Sinclair, of Woodstock ; diseases of women, Dr. R. E. Webster, of Ottawa ; diseases of children, Dr. Jas. Newall, of Watford ; pathology, therapeutics and bacteriology, Dr. Isaac Wood, of Kingston ; homeopathic examiner, Dr. W. A. McFall, of Peterborough.

TORONTO one year ago had thirty-six insane in jail ; to-day there are but three. Dr. R. W. Bruce Smith, Inspector of Hospitals and Prisons, has been on a tour of inspection of these institutions in Eastern Ontario and reports the jails almost free from insane inmates.

THE Ontario Medical Council met in Toronto during the week ending the 8th of July and elected the following officers : President, Dr. Albert A. Macdonald, Toronto ; Vice-President, Dr. W. H. Moorhouse, London ; Registrar, Hon. Dr. R. A. Pyne ; Treasurer, Dr. H. Wilberforce Aikins.

THE staff of the Manitoba Medical College has been enlarged to twenty-nine by the addition of the following practitioners of Winnipeg : Drs. A. J. Douglas, O. Bjornson, G. Heibert, C. C. Field, W. Rogers, H. Mackay, S. J. Elkin, A. J. Burridge and W Webster. The faculty is erecting a new building and have adopted the five year course.

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Original Articles.

THE SELECTION OF CASES FOR THE MUSKOKA FREE HOSPITAL FOR CONSUMPTIVES.

By C. D. Parfitt, M.D., M.R.C.S., L.R.C.P., Gravenhurst, Ont.

Physician in Charge of Muskoka Free Hospital for Consumptives.

The extermination of tuberculosis depends largely on the general practitioner. We look to him to recognize the disease in time, and to make existing sanatoria of the utmost possible use to the community. At the Muskoka Free Hospital, intended and plainly announced to be for the treatment of incipient pulmonary tuberculosis, out of a total of 419 admissions during three years, 32 per cent. have been far advanced cases. Moreover, about one-third of all applications sent are refused on account of obvious unsuitability of cases. That is to say that about five-ninths of all cases recommended by physicians are entirely unsuitable for sanatorium treatment. It is true that people of the working class for whom the institution is intended, are often deplorably late in seeking medical advice. It is also true that where there is any doubt in the mind of a physician, no harm is done by making application, provided that patient and physician are prepared to take a refusal, if necessary. But the fact that some physicians, general practitioners, almost invariably recommend good cases leads to a belief that the cases are to be found and could be given the benefit of the hospital in greater numbers if there were a better general understanding among physicians of the factors that make for suitability or unsuitability of cases for sanatorium treatment.

Considerations other than those of suitability often lead physicians to urge an application. But the hospital is not a home for consumptives. It has seventy-five beds (of which on account of lack of maintenance funds, only from fifty to sixty are available) intended for patients in the incipient stage of tuberculosis, or if in an advanced stage, giving distinct promise of arrest under proper conditions. Our waiting list is so long that accepted cases have to wait from six to eight weeks for admission although the term of residence has been limited to four months. This is equivalent to about fifteen admissions per month in a province where 2,500 die yearly of tuberculosis. It is therefore wrong and unjust to recommend patients because it is a matter of convenience for their physicians to get rid of them, or because they need a home and care, or because they or their sympathetic physicians believe that while there is life there is hope in tuberculosis, for it is obvious that every far advanced case who comes to the hospital is keeping out until too late the wage-earner who has a good chance for recovery.

The question naturally arises as to why any far advanced cases have ever been admitted. The reasons are two : in the early days of the hospital we wished to make our beds of immediate use to the public and accepted our complement of cases with small opportunity for choice before the hospital became known and the applications numerous ; now we make careful selection, but the far-advanced cases, though not nearly so many, are still in the hospital, because of the opportunity for misunderstanding or misrepresentation entailed in the only method of admission practicable for the majority of our cases, *i.e.*, the correspondence method. The medical examination form supplied by the hospital, which is no doubt known to most practitioners, is tolerably satisfactory when filled out fully, carefully and fairly. I say fairly, because not infrequently an entirely false representation of the case is given, and usually when the patient arrives, his disease is found to be in excess of that noted on application. Some applications are refused; in doubtful cases the doctor is written to for further information ; accepted cases are classified so that the most favorable are, if possible, given preference for early admission. The intention is not to refuse a single favorable case. When a far-advanced case of bad prognosis does gain admission to the hospital, he may be discharged before his four months' term has expired, in order to make way for a better case. To such a patient a month's training is usually given. In that time he can learn the essentials of caring for himself and for others. But the stamp of incurability goes with refusal of application, or discharge before the term is up, and the wise physician saves his patient from bitter disappointment by a careful consideration of the factors for or against a good prognosis before applying, and by refraining from extravagant promises to the accepted patient. Splendid results are obtained with care-

fully selected early cases, but only a small percentage of advanced cases can be arrested. There is often too great optimism on the part of physicians who appreciate sanatorium advantages. Most of our patients come to the hospital expecting to achieve in a four months' term, as definite and final a cure of tuberculosis as they would of typhoid.

Prognosis determines the suitability of any given case for sanatorium treatment. Accurate prognosis in tuberculosis is often a difficult matter. It is nevertheless quite possible to classify the great majority of cases as of favorable, doubtful or unfavorable prognosis. A review of the significance and application of certain accepted arbitrary classifications in the light of sanatorium experience will I believe, help the physician in his prognosis and selection of cases. The National Association for the Prevention of Tuberculosis, at its recent meeting in Washington, recommended that all sanatoria use the following definitions of the terms incipient, advanced and far advanced. With very slight modifications they have been used at the Muskoka hospital since it opened.

Incipient (favorable).

Slight initial lesion in the form of infiltration limited to the apex or a small part of one lobe.

No tuberculous complications.

Slight or no constitutional symptoms (particularly including gastric or intestinal disturbances or rapid loss of weight).

Slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours, especially after rest.

Expectoration usually small in amount or absent. Tubercle bacilli may be present or absent.

Moderately Advanced.

No marked impairment of function either local or constitutional.

Localized consolidation moderate in extent with little or no evidence of destruction of tissue;

Or disseminated fibroid deposits.

No serious complications.

	Marked impairment of function, local and constitutional.
Far Advanced.	Localized consolidation intense;
	Or disseminated areas of softening;
	Or serious complications.

Acute Miliary Tuberculosis.

From the sanatorium point of view incipient cases are essentially of hopeful prognosis. Besides having but little local involvement and very slight constitutional disturbance, the symptoms and signs should point to the absence of a secondary infection. Cases with comparatively few abnormal signs in the lungs, but with severe accompanying constitutional symptoms are often mistakenly recommended as incipient cases because of the comparative lack of pulmonary signs alone, regardless of other more important factors. Frequently they should rather be considered far advanced, and must therefore be rejected, although the duration of disease may have been comparatively short.

The moderately advanced class is a comparatively broad one and contains more cases of doubtful prognosis than either of the others. Secondary infections are frequently present. The disease is more marked, both locally and constitutionally, than in the former class, but a balance must be struck between the local and general condition; if there should be any disproportion on the one side it must be compensated by a relatively less grave condition on the other; *i.e.*, if a considerable amount of local disease is present the constitutional impairment must be relatively slight, and *vice versa.*

In the far advanced class are placed many cases which may be neither of long duration nor of very extensive local disease. Constitutional symptoms of a severe type might place a case with comparatively little local disease in this class; and conversely, a case of longstanding with widespread fibroid disease and evidence of past excavation would, without very marked constitutional impairment, also be rightly placed here.

It is needless to say that the hospital does not wish to receive cases which should be classed as far advanced or acute miliary.

The National Association at its recent meeting also suggested the use of certain definitions of the extent of disease in the lungs. These definitions, a part of Turban's scheme for a method of comparative statistics for pulmonary tuberculosis, were recommended for adoption at the International Conference on Tuberculosis a year ago. They are as follows:

CLASS I.—Slight lesion extending at most to the volume of one lobe or two half lobes.

CLASS II.—Slight lesion extending further than I., but at most to the volume of two lobes : or severe lesion extending at most to the volume of one lobe.

CLASS III.—All lesions which in extent of the parts affected exceed II.

By "slight lesion" we understand disseminated centres of disease which manifest themselves physically by slight dulness, by harsh, feeble or broncho-vesicular breathing and by râles.

By "severe lesion" we mean cases of consolidation and excavation, such as betray themselves by marked dulness, by tympanitic sounds, by very feeble broncho-vesicular, bronchial or amphoric breathing, and by râles of various kinds.

Purely pleuritic dulness, unless marked, is to be left out of account ; if it is serious, the pleurisy must be specially mentioned under the head of "tuberculous complications."

The volume of a single lobe is always regarded as equivalent to the volume of two half lobes, etc.

These broad definitions may prove of practical service to the practitioner in helping him to classify the lesion from the sanatorium point of view. It must not be inferred, however, that the Classes I., II. and III., correspond necessarily with the terms incipient advanced, and far advanced. Indeed many cases with local lesion in Class I. would, on account of the nature of the constitutional symptoms, be classified as moderately advanced or possibly far advanced ; cases with local lesion in Class II. would generally be classed as moderately advanced, though sometimes far advanced; while many cases with local lesion in Class III. might be classified as moderately advanced.

The following classification of lesions with modifying conditions based upon these definitions may be suggestive. (Apical lesions are understood in all cases where basal lesions are not specified.)

FAVORABLE.

Lesion.	General Condition.	Complications.	Fever.
Classes I. and II.	good	none	none, or with fever—max. 100.5°
Class III..... (Small amount of excavation; expectoration slight.)	good	none	none
Classes I. and II.	good	slight—non-tuberculous or slight laryngeal lesion	none

Dry pleurisy, or thickened pleura, or pleurisy with effusion, with mild symptoms and short period of fever.

DOUBTFUL.

Lesion.	General Condition.	Complications.	Fever.
Class III..... (Excavation slight.)	good	none	with fever—max. 100.5°
Classes I. and II.	moderately impaired	none	with fever—max. 101.5°
Classes I. and II.	moderately impaired	slight—non-tuberculous or laryngeal	with fever—max. 100.5°
Classes I. and II.—Basal	moderately impaired	none	with or without slight fever

Pleurisy with effusion and continued fever.

UNFAVORABLE.

Lesion.	General Condition.	Complications.	Fever.
Classes I. and II.....	impaired	none	fever exceeding 101.5°
Classes I. and II.....	impaired	present	with or without fever
Class III..... (Apical, with extensive excavation.)	impaired	none or present	with or without fever
Class III.—Basal	impaired	none or present	with or without fever

Chronic fibroid phthisis; miliary pleurisy, both sides; acute symptoms; general miliary disease, as indicated by vague, not localized physical signs, rapid pulse, rapid respiration and cyanosis.

Consideration of the local condition must not blind one to the many other factors which tend to make a case favorable or the reverse, and which are of such importance that in a majority of instances the prognosis is influenced by them rather than by the local condition. These are so numerous and varied that they can only be ascertained by careful enquiry and thorough examination. So many points must be considered that they cannot be didactically summarized to indicate what is favorable or unfavorable and at the same time allow the summary to be sufficiently elastic to include all variations of cases. However, some factors which may tend to make prognosis doubtful or unfavorable may be ascertained by the physician in taking the history, or on examination, as follows:

Family History.—Delicate parentage, which may or may not be the result of tuberculosis, especially maternal tuberculosis at birth.

Previous History.—Occupations which are confined and dusty, or which help to produce a dissipated life; dissipation, alcoholism, tendency to excesses of all kinds; delicate constitution, poor development, late maturity, frequent illnesses.

Present Condition.—Extremes of age—under 15 and over 50; the menopause; temperament—neurotic, emotional, melancholic; morale—carelessness, either wilful or ignorant; build—delicate, slender, very tall; nutrition—habitually underweight; chest formation—flat, pigeon chested, rachitic, etc.; Hippocratic fingers marked; poor peripheral circulation; marked cachexia.

Mode of Onset.—Development during menopause, pregnancy or lactation; imperfect recovery from unresolved lobar (?) or broncho-pneumonia(?), typhoid(?) or typho-pneumonia(?) or typho-malaria(?); following acute infectious diseases—measles, pneumonia, typhoid, chronic bronchitis, asthma, chronic dyspepsia, pronounced anemia.

Symptoms.—Severe cough—upwards of six months; large amount of expectoration—upwards of oz. 2; repeated severe hemoptysis; hoarseness; abdominal breathing due to lack of chest movement; marked dyspnea; persistently rapid pulse; swollen feet; slight cyanosis and hectic flush; long period of fever with or without chills and sweats; fever above 100.5°; night sweats; marked or rapid loss of weight; marked anemia; marked dyspepsia or diarrhea; prolonged or marked debility; marked nervousness, restlessness or sleeplessness; symptoms of complications.

Complications.—Non-tuberculous—chronic gastritis or entero-colitis; pronounced cardiac disease, valvular or muscular; marked arterio-sclerosis; nephritis; chronic cystitis; diab tes; old or

recent syphilis ; emphysema ; chronic bronchitis. Tuberculous—enlargement and tenderness of cervical lymph glands ; intestinal tuberculosis ; rectal abscess and fistula ; genito-urinary tuberculosis ; peritoneal, bone or joint tuberculosis ; markedly thickened pleura ; pleurisy with effusion ; empyema ; pneumothorax ; pyo-pneumo-thorax ; laryngeal tuberculosis : (*a*) Doubtful : superficial ulceration of the cords and venticular bands, limited infiltration of inter-arytenoid space without ulceration, ulceration of inter-arytenoid space with or without slight infiltration. (*b*) Unfavorable : ulceration with swelling of arytenoids and ary-epiglottic folds, general ulceration with perichondritis, ulceration of epiglottis.

A few cases from the hospital records may serve to illustrate various points brought out in this paper.

(*a*) Two cases accepted as very good on the evidence of the examination form as filled out by physicians. In both cases the condition was verified by examination of the patient on arrival, and the cases were classified as incipient.

1. "M.B.—age 19 ; tailoress ; family history slightly consumptive ; onset : anemia ; 6 lbs. loss in weight ; cough for five weeks ; expectoration for four weeks, slightly streaked, bacilli present, amount now oz. 4 ; slight dyspepsia ; slight fever (100°) ; pulse 88. Local condition : right apex very slight dulness, slightly prolonged expiration and increased vocal fremitus."

The lesion here, confined to one apex, belongs to class 1. The modifying conditions are such as to bring the case into the favorable class described above.

2. "H. H. J.—age 22 ; coachman ; onset : cough five months ago, expectoration six weeks ago, amount now oz. ½, slight hemoptysis two weeks ; has had night sweats ; fever for a few days, no rise in temperature now ; 10 lbs. loss in weight ; condition otherwise good. Local condition : rise in pitch percussion note right apex posteriorly ; expiration prolonged below right clavicle, crepitations right submammary region. Reacted to .006 gm. tuberculin."

The lesion is again class 1, and conditions favorable.

(*b*) Two cases illustrating deliberate misrepresentation or careless examination by the practitioner.

1. A. J. Z.—age 34 ; nurse. Application form shows onset after typhoid four years ago with cough and hemorrhage ; has had fever and night sweats ; cough now troublesome ; sputum oz. 8, with bacilli ; temperature normal, pulse 84, digestion good. Local condition : right lung, negative ; left lung : percussion note a little dull at apex, respiratory sounds impaired ; apex beat normal. Physician considers patient incipient, and adds, "she is a hopeful case, and I am anxious to get her where the conditions will be favorable for her during the coming winter."

The patient was accepted as doubtful on the evidence of this

recommendation, was speedily admitted (this was before the pressure for admission was so great) and at examination on arrival proved to be a far advanced case with bad prognosis. The local condition was: right lung, apex, early infiltration; lower lobe, moderate infiltration at the apex and along fissure, softening at angle of scapula; left lung, marked infiltration of upper lobe; enormous excavation of the lower lobe in the axilla; heart markedly displaced to the left. The patient was also cachectic, had some temperature and marked dyspnea.

2. M. C.—age 37, housekeeper. Application form showed good previous history; onset 3 months ago; cough and expectoration one month, bacilli present, expectoration now oz. 3; loss in weight 4 lbs.; evening temperature 99°; pulse 100; laryngeal tuberculosis; *chest normal;* disease stationary; considered incipient.

This patient was admitted as doubtful on account of laryngeal condition and amount of expectoration, and came into the hospital one month later, when she gave a history of cough and expectoration for 10 months, three hemorrhages during the past month; her present condition showed 14 lbs. loss in weight, a temperature of 100.5° maximum, and profuse night sweats. The local condition on examination proved to be: right lung, apex, early infiltration in front, and behind; lower apex ditto; left lung, severe lesion; consolidation and infiltration to the fifth rib in front; extensive excavation; infiltration throughout behind. Larynx: ulceration of both cords, of both false cords, and base of epiglottis. The case is obviously far advanced and of bad prognosis.

C. One case refused admission.

1. J. P.C.—age 18, dry goods clerk. Pneumonia the winter of '04, pleurisy '05, good recovery; onset with cold 2 months ago; expectoration 6 weeks ago; night sweats. Present condition: coughs much, sputum oz. 5, bacilli; temperature 102° to 103°, respirations 32, pulse 108; night sweats; poor digestion with frequent vomiting. Local condition; right lung normal; left lung, percussion note dull; respiratory sounds abnormal, moist râles both in front and behind. Physician notes: "Left lung badly affected." Tendency of case upwards—considered incipient with promise of arrest.

The case was refused as obviously unfit for sanatorium treatment, and the physician wrote a protest to the Toronto office as follows: "I was somewhat surprised when Mrs. C. showed me your letter to her *re* her son. J. P. C. has been sick only two months, and if the sanatorium is good for any case I think it ought to be good for him. I never saw any case that was benefited by Muskoka treatment yet. I suppose the atmosphere . . . . ought to be beneficial, and it is too bad that this poor boy, who has been the mainstay of his family, should not have a chance for

his life. I hope you and the Medical Superintendent will reconsider the decision and decide to admit him."

Such protests as this are by no means uncommon. But while some doubtful cases no doubt deserve a trial, the very doubtful must be rejected in favor of others who show promise of receiving material benefit. Some advanced cases give promise of arrest for an indefinite period, while incipients with acute symptoms are often quite unfavorable. Acute cases are best kept at home, at least until the acute symptoms have subsided, One of Dr. Gee's aphorisms is: "One may be quite sure that in any case of phthisis the disease is much more extensive than the physical signs would seem to indicate."

Tuberculosis is no doubt an undramatic and uninteresting subject, but it makes up a large proportion of the human ill which every physician has to fight. There seems to be a good deal of apathy in the profession regarding the recognition of the disease in an early stage. After the most careful examination of a suspected case the physician is often still in doubt whether it is tuberculosis or not; but is the case in which tuberculosis may be the obscure cause always carefully enough investigated with that disease borne in mind? Our records show that with a little more attention to the history, or with less willingness on the part of the physician to deride the possibility of tuberculosis when symptoms point definitely towards that diagnosis, many cases might have been placed under treatment at a much earlier date. When rational signs exist it is not necessary to wait for the demonstration of bacilli before making a diagnosis. Rather send the patient to a sanatorium at once, where a thorough attempt will be made to prove him non-tuberculous and a short training can only be beneficial. The man who diagnoses tuberculosis with the clothes on and without a thermometer will find nothing in the above definitions and classifications. He will continue to try to foist hopeless cases on sanatoria, and to have applications refused. He will be eternally skeptical of sanatorium results. The only hope for him is that the laity, who are taking now such intelligent and energetic interest in the world scourge of of tuberculosis, will shame him out of his apathy. They begin already to recognize the doctor who never examined sputum, who didn't use his stethescope, who failed to take temperatures, who made light of striking symptoms—who, in a word, *didn't find out in time*—and to be indignant with the doctor who sends a dying man on a needless journey, costly and painful, to some health resort or sanatorium.

A SUMMARY OF TWO HUNDRED AND SEVENTY LAPAROTOMIES WITH REMARKS ON THE TECHNIQUE ADOPTED.*

By T. K. Holmes, M.D., Chatham.

The various questions in surgery are so fully considered in text books and magazines by writers of great skill and experience, that one may feel justified in believing that a short paper based on personal experience in the technique and management of a number of laparotomies, might prove of interest to some whom I have the privilege of addressing to-day. The series of cases presented, embraces two hundred and seventy in number and may be classified as follows :

Ailments.	Operations.	Deaths.
Appendicectomies	111	2
Suspension of uterus	38	0
Hermotomies	22	0
Ovariotomies	30	1
Hysterectomies	14	1
Extrauterine Pregnancies	7	0
Suppurating tumors of abdomen	4	0
Suppurating ovary	1	0
Exploratory operations	10	0
Myomectomies	5	1
Pelvic abscess	9	0
Pyosalpynx	7	1
Tubercular peritonitis	4	0
Procedentia uteri	3	0
Gall stones	4	0
Nephrectomy (abdominal)	1	0

comprising in all 270 operations with six deaths or a mortality of 2.22 per cent. During the time embraced in this series there were three cases of appendicitis, one myomatous uterus and two cancerous uteri upon which I declined to operate, considering them beyond hope of success. The three cases of appendicitis were moribund when I first saw them. The two cases of cancer of the uterus were too far advanced to operate upon, and the case of myoma of the uterus was declined an account of the extreme

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anemia from hemorrhage. This patient was taken to a neighboring city, but died during the operation. Analyzing the six deaths in this series the following may be stated :

Both cases of appendicitis were interval operations and were simple easy eases. The first was a young woman who had suffered many slight attacks extending over several years and had pain and tenderness during the intervals. To relieve these and to enable her to pursue her work she had taken antifebrine almost daily for many months. She took the anesthetic badly and her color and circulation were bad from the time of the operation until she died three days after.

The other appendix case was in a young man, who had also tubercular peritonitis and was in an unfavorable condition. He had uncontrollable hiccough and lived a week after the operation.

The fatal hysterectomy was a case of myoma of the uterus in a girl twenty-six years old. She, too, had taken hundreds of doses of antifebrine for pain, and although the operation was an easy one she did badly and lived only three days. I have decided not to operate on any patient who has used this drug long, and I have no doubt that the fatal result in those two cases was due to the condition brought about by the long use of this drug.

The fatal case of myomectomy was a woman four months pregnant. She did well for a month, when she miscarried; but did well after this for another month, when the bowels became obstructed and she sank rapidly. I began anesthesia with the view of opening the abdomen and, if possible, relieving the obstruction, but her condition became so alarming that the anesthetic could not be continued.

The fatal ovariotomy was in a woman fifty-two years old. She did well for four days, when uncontrollable vomiting occurred and continued until her death, five days later. The autopsy revealed a band of adhesion encircling a loop of small intestine and completely closing the gut. This could have been easily divided, and the patient's life probably saved, but other symptoms led me to think there was paresis of the bowels that would be overcome by other means.

The death of the patient with pyosalpynx was due to incessant vomiting from paresis of the intestines.

Except in emergency cases, the patient is prepared for operation by securing a healthy condition of the digestive apparatus and a normal condition of the excretions, particular attention being paid to the stools and the urine. Thirty-six hours before the operation the bowels are freely moved by a brisk purgative, usually three compound cathartic pills, given at bedtime. The evening before the field of operation is shaved and thoroughly cleansed with soap and water, followed by a saturated solution of permanganate of potash, and this by a solution of oxalic acid. A

gauze compress, wrung out of a bichloride solution 1 to 2,000, is then applied and allowed to remain until next morning after the patient is anesthetized, when the skin is again washed with soap and water followed by alcohol, ether or bichloride solution.

All parts of the body are warmly clad. All assistants have their hands and arms sterilized, wear sterilized suits and caps, and those handling instruments or sponges wear gloves. Sponges are passed to the operator or assistant by means of sterile forceps. Those more intimately concerned in the operation wear gauz masks to prevent infection from the mouth. No infected case is operated on in the operating room for clean cases.

A chief aim has been to prevent shock, and with this view the maintainance of bodily heat by having the operating room well warmed and the surface of the body well clad, has been the uniform rule. In addition to this, rapidity in operating, the control of hemorrhage, the protection of the intestines, when exposed, by towels wrung out of hot salt solution, and the avoidance of handling the viscera, are of the utmost importance.

In cases in which the transfusion of salt solution is likely to be required, this is done before symptoms of shock appear, often as soon as the patient is anesthetized. Adrenalin is useful is raising the blood pressure and so overcoming shock. Lavage of the stomach before the patient regains consciousness, prevents or lessens vomiting Drainage is not used except in infected cases.

Embraced in this series of cases are 119 consecutive laparotomies without mortality.

While many cases presented no difficulty in the operation some were of an extremely grave character. One was a ruptured appendical abscess into the general pentoneal cavity in a woman four months pregnant. The appendix was gangrenous. Two of the abdominal hysterectomies were in women with myomatous uteri and pregnant, respectively two months and four months. Five of the extra uterine pregnancies had ruptured before operation, and hemorrhage into the abdominal cavity had been very profuse. In one of the five both tubes were impregnated.

In one hysterectomy for myomatous uterus adhesions were so troublesome that a part of the small intestine was accidentally so badly injured that it was necessary to resect the torn part and use a Murphy's button. Recovery was satisfactory and the button was passed on the eleventh day.

THE MEDICAL TREATMENT OF EXOPHTHALMIC GOITRE.*

By R. D. Rudolf, M.D.

Perhaps it would be better to call this communication notes on the non-surgical treatment of Graves' Disease. The reason for this distinction is the fact, which dawns the brighter the more one sees and studies the course of these cases, that many (some say the majority) of them tend to improve and even recover completely under the most varied forms of treatment. It might even be correct to say that the disease tends to recovery *in spite of* some treatments!

An immense variety of treatments have been tried and advocated in this condition, each one in its turn to be followed by a list of cures, and then of others which have not so improved. It is often said that whenever one finds a great number of treatments recommended for any disease, one may conclude that none of them are very satisfactory. This is very true, yet it by no means follows that that disease is therefore hopeless, or unlikely to be recovered from. What disease calls for a greater variety of treatments than a cold in the head, and yet the prognosis is good, and we all recover from it under the influence of or in spite of the treatment of almost every friend we meet.

The first point then that I would advance is that there exists in Graves' Disease a strong natural tendency towards recovery. Hence in order to give full credit to that most powerful ally of ours, the *vis medicatrix naturæ*, emphasis is here laid on this natural drift of the condition towards cure. Dr. Norris (Hare's "System of Practical Therapeutics," Vol. 2, p. 850) puts this idea in other words, when he says that "a placebo often gives good results, and many good results from various drugs no doubt are thus explained."

Bristowe states that the disease is not usually dangerous to life, and when death occurs it is usually due to some intercurrent affection. Fagge states also that most cases eventually recover and that he knew of few deaths. G. R. Murray (*Lancet*, Dec. 13th, 1902) found that, out of 40 consecutive cases of his own, 31 progressed favorably and 7 died. W. M. Ord and Hector Mackenzie (C. Allbutt's "System of Medicine," Vol. 4, p. 502) came to the conclusion that about 25 per cent. of all well-marked cases ended in death; that about 50 per cent. attain more or less complete re-

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covery ; and that the balance of 25 per cent. remain *in statu quo* or only slightly improve.

The general opinion then, as judged from literature, is that few cases die directly from the disease, but that many do so from intercurrent affections ; and that, while the cases are hard to keep track of, about fifty per cent., more or less, recover eventually.

The essential nature of the disease is uncertain, but the favorite theory is that most of the symptoms are due to an excess of thyroid secretion circulating in the blood ; in other words, the patient is suffering from thyroid poisoning, and is in fact in a condition the very opposite of Myxedema. She is intensely nervous and emotional, and the least physical, mental or emotional excitement sends her already fast pulse up, and produces flushing and perspiration.

It is most essential that such a case should be put at rest; perhaps not in bed, although this is often best at first. She should be kept mentally, physically and emotionally quiet.

The state of the general health should be raised as high as possible and anemia, constipation and any other abnormal condition should be carefully attended to.

The diet should be plain and good and all stimulants had better be omitted.

Beyond these general methods of raising the tone of the patients, our endeavors may be classed under two headings :

1. To prevent the excessive production of thyroid secretion ; or to neutralize the poisonous amount of it that is circulating in the blood.

2. To treat the symptoms as they arise.

In the first class come operative measures on the thyroid gland, such as removal of part of the over-functionating organ. Less radical measures than operative ones have for long been in vogue, with the object of checking the over-activity of the gland, among which may be mentioned pressure to the organ and the application of cold, either in the form of ice or by means of Leiter's tubes.

The employment of electricity, either as galvanic or faradic current, probably may be classed here.

There is no certain way of neutralizing the excessive thyroid secretion in the blood. Possibly the use of thymus gland extract might be mentioned as one, as this material has in many ways the opposite action to the thyroid secretion, but the results of its use have not been encouraging. The administration of thyroid gland was suggested some years ago by Professor Jones. Theoretically it seemed quite wrong to give more of what was already in excess in the blood—much like giving alcohol to cure drunkenness—and yet good results occasionally followed, although oftener the reverse. Later, Professor Jones found that what he had really been giving was the thymus gland. It seems that the butchers had been asked

to supply portions of the large gland in the neck of the calf, and, as under one year of age the thymus gland is as large as the thyroid, the mistake arose. A treatment which has been much tried in Germany and occasionally elsewhere is the administration of the blood or blood serum or even the milk of animals from which the thyroid gland has been removed some time before. The idea is that the use of the thyroid secretion in the blood of the normal individual is to neutralize certain toxins which have been produced elsewhere. In thyrodectomised animals these toxins have accumulated—being unneutralised—and when the blood of such is administered to a person suffering from Graves' Disease, the excess of toxins, thus introduced, neutralises the superabundant thyroid secretions and thus relieves the thyroid poisoning. There seems to be a great margin for error here, and the results have not been encouraging, although, as usual, a certain number of cures are reported. G. R. Murray tried the treatment in two cases last year with negative results.

One theory of the nature of the disease is that in it the parathyroid glands are not acting properly—not controlling the secretion of the thyroid—and that therefore this gland is over-functionating. W. G. MacCallum, of Johns Hopkins University, suggested, I believe, that Graves' Disease might be due to such a cause, and that therefore the giving of an extract of parathyroids might be beneficial. He had tried it in one case with great benefit for a time, but the patient unfortunately died of an intercurrent tuberculosis.

Recently Dr. J. J. Walsh, of New York (*American Medicine*, May 25, 1905), reports some cases in which he used this treatment without any benefit. Seeing then that we are so powerless, as yet, to check the excessive secretion of the thyroid gland or to neutralise the abnormal amount of the secretion in the blood, it only remains for us in most cases to treat the symptoms as they arise. And by so doing we do not merely mark time until such time as the natural return to health is likely to occur. By placing the patient at rest, soothing the nervousness, etc., we undoubtedly hasted this return to health, and even may, in some cases, so alter the balance as to cause a return to health when otherwise it might not occur, and thus may make the difference between life and death.

An immense number of medicinal remedies have been used from time to time, and it would serve no useful purpose for me to enumerate them here.

Of those that I have personal experience of the most generally useful have been Belladonna and the bromides. Under moderate doses of these the patients usually quickly become less nervous. Ramsay (*Glasgow Medical Journal*, 1891), after a very exhaustive

study of the subject, came to the conclusion that Belladonna is the most valuable drug that we can employ.

Theoretically Digitalis and Ergot should do good by toning up the blood vessels and slowing the rapid heart, but though some good results have been reported, on the whole they are disappointing, and Digitalis often seems to do harm and is peculiarly apt here to disturb the stomach. Strophanthus is not so open to this objection.

The employment of preparations of iron has given rise to much divergence of opinion, some thinking that it is most valuable, while others condemn its use. When anamia exists, as is often the case, it seems only rational to employ the drug, not for the treatment of the symptoms of Graves' Disease, but in order to get the blood into a better condition.

Arsenic and phosphorus are often used for their tonic effects, and it is interesting to note that an Italian worker, Dr. Luigi Macaggi, found by experiments on dogs that both of these drugs lessen the secretion of the thyroid gland through changes produced in the epithelium. Be this as it may, it is quite certain that they have no powerful action in this way when used in medicinal doses.

To recapitulate,—

The non-surgical treatment of Exophthalmic Goitre may be summerised as follows :

1. First, and most important, the patient should be placed in a state of physical, mental and emotional rest. If the case be at all acute, she had better be kept entirely recumbent, as the upright position will greatly hasten the heart's action.

As a rule these cases do better away from home, either in a hospital or sanitarium. In some cases the strict regime of the Weir Mitchell is advisable.

2. By careful dieting and in every way possible the general health should be raised ; and anemia, constipation and every other deviation from normal must be attended to. As has already been mentioned, very few cases of Graves' Disease die from the disease itself, death when it occurs being due to some intercurrent affection —hence the special need of looking after the general health.

The climate at a moderate elevation seems to be specially beneficial, and hence such a location should be chosen whenever possible. Nothnagel considers "a sojourn in a place of moderate elevation as most important."

3. Various local applications may be employed, such as pressure to the thyroid gland, or a mild galvanic or faradic current ; but probably the most valuable local treatment is application of cold to the thyroid gland, or to the precordium, either in the form of an ice-bag, or as Leiter's tubes. Such use of cold often greatly controls the rapid action of the heart.

4. As regards medicinal remedies, these will vary greatly with the practitioner. Nearly every man has some remedy which he specially relies on; which fact proves, as has been said, what a secondary place all drugs take in the treatment of this condition.

Personally, I like to give a mixture of Belladonna (10 to 15 minims of the tincture, thrice daily) combined with strontium bromide; and feel convinced that the patients soon feel very much more comfortable as a result of such remedies.

5. Any special symptoms, such as threatened heart-failure, urgent diarrhea, etc., must be met with appropriate remedies.

Under such hygienic and medicinal treatment most patients will slowly improve, and some will completely recover. But the majority will retain some traces of the disease, such as cardiac irritability, general nervous instability and some exophthalmos.

The disease is a prolonged one, and the patient requires much patience and all the encouragement that the attendant can give; the latter should resort to mental therapeutics as much as possible.

Lastly, a few cases will get worse, and in a few of them surgical aid seems to be indicated; but this must not be lightly undertaken, as the immediate danger is considerable, and the results are not by any means always satisfactory. Kocher has reported many cases now, in which operation has produced very brilliant results; but Ehrlich is much less enthusiastic, and mentions eight cases in which partial extirpation of the thyroid had been done. Several of them were not relieved, or suffered a recurrence of the old symptoms after a temporary relief. Ord and Mackenzie (Clifford Allbutt's "System of Medicine," Vol. 4, p. 502), reviewing the cases operated upon up to a few years ago, conclude that "If we compare the results of operation with those of other methods of treatment, we find no striking difference except in the death-rate of 12 per cent. due to the operation."

The several cases in which I have seen the most marked benefit from operation have been ones in which a tumor has been present in the thyroid—*e.g.*, a fibroid—and Graves' Disease has resulted. Here the tumor seems to have acted as an irritant, causing an over-activity of the gland, much as a foreign body in the eye will produce an excessive secretion of tears, and the removal of this source of irritation by operation has been followed by complete relief of the symptoms.

A REPORT OF CASES OF ELECTRICAL BURNS FROM "LIVE WIRES."*

By H. H. OLDRIGHT, M.B., ST. CATHERINES ONT.

Mr. President, Ladies and Gentlemen,—My attention was first directed to the study of burns by "live wires" from having been called to attend a case in the vicinity of St. Catharines, Ont., on July 1st, 1902.

On arriving, I found that one man had been killed outright by the electric current, and although the employees had made every effort to resuscitate him by keeping up artificial respiration for an hour's time.

I will give a report of the *post-mortem* examination at the end of this paper; also, I will append the medical references which I have found in reading what literature I could find on the subject in general.

On the subject of shock, from high voltage currents causing death, it will suffice here to say, that it seems to occur, either from paralysis of the respiratory centre or for a peculiar condition of tonic fibrillary contraction of the heart muscle, analogous to that described by physiologists, a condition anteceding actual death.

If a strong current passes in a direct path from the hand or the head to the foot through the heart, we may expect to have this planic state of the heart in any given case.

If, on the contrary, the current passes through the cerebro-spinal centres (*e.g.*, from hand to hand contact with a "live wire") we may then expect to have a condition of paralysis or paresis of these centres.

In either case the only treatment suggested by the authorities is to use artificial respiration, as in the case of one apparently drowned, using at the same time the Laborde method by traction on the tongue carried out rythmically sixteen times to the minute, the ordinary respiratory rate.

As to the lesions caused by the passage of the electrical current from "live wires" I might best illustrate them from a report of two cases under the care of Dr. J. M. Elder, Surgeon to the Montreal General Hospital and lecturer on Applied Anatomy at McGill University.

He first notes the observations of Dr. Sharpe, of St. Louis, Mo.,

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published in the "Year Book" for 1899, and taken from the *Philadelphia Medical Journal*, Jan. 29th, 1898.

He, Dr. Elder, remarks, that from the surgical standpoint there had been little written up to the date of Dr. Sharpe's paper, and till his own was read Nov. 3rd, 1899.

Now, in cases of burns by electricity the fluid or current has an effect not only on the epithelial layers, but during its passage through the underlying structures it causes a degeneration of the tissues varying in extent and degree. This is proportionate to the strength of the current and also to the length of the period of contact.

Now, I may say shortly, that to us, as medical men, voltage or the number of volts means the pressure or tension of the electrical fluid in any given wire. Amperage or so many amperes means the rapidity of flow of the current. An ohm is the measure of resistance. This is as it appears to me after having made inquiries from practical electrical engineers.

Now, in the case of the patient whom I attended at the same accident and who survived, the wire or cable with which he came in contact was under a tension of 22,000 volts. Of course he did not receive the whole force of the current, but, as his arm or wet sleeve came in contact with the cable he received a certain amount of it. It jumped to his right arm burning through the cutis vera, or whole thickness of the skin, over an area about 4 by 8 or 9 inches. There were also deep burns on the forearm and a slight one on the abdomen. The sole of the right foot was blistered across the bases of the toes. The base of the great toe and underside of the toe itself was burned down to the bone over an area about ¾ by 1½ inches. The joint at the ball of the great toe was tender (and still is at times), as if the current in passing through the cartilages had caused some lesion.

And now let me say that Dr. Elder found in his cases, which required amputation, that the muscles degenerated and sloughed not only at the line of demarcation in the skin, but even up to their insertions near the head of the bone (in one case the humerus).

These burns have a dry ashy-grey charred appearance, and inflammatory reaction around them comes on in the course of two or three days, with much swelling.

The best treatment, I think, is to use dry anteseptic dressing in the beginning, and afterwards wet dressing as required to absorb discharges from the suppurating areas.

There is a greater tendency to hemorrhage while the sloughs are separating, and this should always be looked after, as Dr. Elder emphasizes.

Dr. J. Alex. Hutchison, of Montreal, skin grafted some cases for Dr. Elder where the stumps were left open at the time of amputation and allowed to granulate.

In my own case quoted here, and in a subsequent case, I found that the healing was slow, owing no doubt to the depth of the burn and lowered vitality of the surrounding tissues.

By slow, I mean, in comparison with the healing of burns from other causes, such as those from caustics, fire or steam, and I think it may be conceded that this is due to the more penetrating action of the electric fluid.

As in the case of lightening it may pass through the tissues in a straight line between the point of entrance in the body and point of exit.

In another way these burns resemble those from the X rays, but the latter are more on the surface and do not seem as a rule to go deeper than the skin. They differ also in appearance. I may say here, before concluding the history of this patient's case, that both the burns on the arm and toe took two months and more in healing, even with removal of sloughs by surgical means and skin grafting. In the case of the toe I used the Thierch grafting process after waiting a month, and then scraping down to the bone. The graft took well, but as the patient could not afford to rest longer than six weeks it broke down again and still does so to a slight extent.

Six months should be allowed with elevation according to Mr. Watson Cheyne, when speaking of grafts on the lower extremity. I have here the original report of the *post-mortem* examination on the other man who met his death while attempting to rescue his fellow workman. At the *post-mortem* held about seventeen hours after death, under order of the Coroner, Dr. Goodman, of St. Catharines, the most noticeable thing was the intense engorgement of the lungs on both sides. They were more like a pneumonic lung or soft liver in appearance. The right heart contained fluid blood. The other organs were, some anemic, some slightly congested. There was no external mark or lesion on the skin.

Dr. Abegail M. Cleaves reports cases where there was an almost identical appearance. (Ref. "Handbook of Medical Sciences," last edition, edited by Dr. Buck, of New York.) I think, therefore, that in this case the shock caused a paralysis or paresis of the heart muscle or tonic fibrillary contraction of the same, and as to the lung engorgement it may have been caused by the respiratory efforts, for he was seen to gasp once or twice after being carried out of the power house.

In conclusion. As we are now living in an age when electricity is every day becoming more used in the commercial and industrial world. I need not add more than to say that I hope that this essay may add some light to the medical and surgical interest on this subject. As we see it written on the shield of the

college under the lamp, so may our motto be, if I may so translate it: "It shines clear to give a little light."

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Selected Article.

THE DIAGNOSIS OF GALLSTONE DISEASE.—BASED UPON THE CLINICAL HISTORIES OF 1,100 OPERATED CASES.

By Drs. William J. and Charles H. Mayo.
Surgeons to St. Mary's Hospital, Rochester, Minn.

In reviewing the mortality of 1,100 operations for gallstone disease we have been impressed with the very fortunate outcome where the gallstones were in the gallbladder and before there were complications. In the 1,100 cases there were 54 deaths, or an average mortality of 5 per cent., counting as a death every operated case dying in the hospital without regard to cause of death or length of time thereafter. Taking them as they come, the death rate in 897 cases where the disease was confined to the gallbladder and for benign conditions was 3 per cent. Included in this group are acute and chronic affections, local peritonitis, complicating intestinal fistula, etc. In 456 cases of simple gallstone disease the mortality was less than one-half of 1 per cent., and fully as good as the interval operation for appendicitis in individuals of the same age and general condition, for it must be borne in mind that those most liable to this disease are at an age in which degenerations of vital organs are often present. The difference between the one-half of 1 per cent. mortality in so large a group of cases, and 3 per cent. by adding to it a nearly equal number in which there were changes due to obstruction and infections, shows the enhanced danger in the latter condition. When we come to the group of common duct operations, amounting to 14.6 per cent. of the whole (one case in seven), we find a startling increase in mortality. In 149 operations for common duct stones the mortality was 10 per cent., however only 6½ per cent. within three weeks, 3½ per cent. later from anemia and general debility, etc. Still more impressive is the fact that 43 cases, or 4 per cent., had developed malignant diseases, and the operative mortality was 21 per cent. In practically all of these cancers gallstone irritation could be shown to be the cause of the malignancy. This at once brings up the vital question: Is it right and just that so large a percentage of patients should be subjected to the dangers consequent upon delayed

operation, to say nothing of the prolonged suffering and invalidism entailed? Can the diagnosis be made while the conditions are favorable, the mortality so low as to be largely accidental and the cure almost certain?

We have no hesitation in saying that, as a rule, it can. There are, of course, some exceptional cases which cannot be correctly diagnosticated, but the percentage of complications can be reduced to a minimum. Even a superficial inquiry into the histories of the common duct series will at once demonstrate the fact that in the vast majority the diagnosis could have been arrived at in the early stages and a safe operation performed.

During the initial period of any special field of surgery the differentiation of the surgical from the medical cases is uncertain, difficult, and often impossible. Perhaps the greatest obstacle to be overcome is the pseudo-knowledge and prejudice handed down to us by a literature founded upon theory and misconception. Once clear the atmosphere of this fog and the diagnosis begins to be easy, and is capable of intelligent solution. The reason for the symptoms becomes clear, and, like every truth in nature, is so simple that the wonder of it is that it was not explained before. One can almost mourn for our old favorites, "bilious" and "hepatic" fever, "gastralgia" and "stomach cramps," and a host of similar delusions based upon the "feelings" of the patient, while the true secret lay buried under the term gallstones, an "innocent post-mortem finding" until resurrected by the surgeon.

There are a few anatomical facts which will explain most of the symptomatology of gallstone disease. The gallbladder is an offshoot of the biliary apparatus, and seems not at all essential for health or comfort. It is about three inches in length, and holds an ounce and one-half of bile. The base of the gallbladder is slightly dilated, and forms a little pouch by the reduplication of the mucous membrane (the pelvis). The cystic duct does not leave from the lowest part, but at a point on the inner wall slightly elevated above the neck, and is about an inch in length. The common duct is slightly over three inches long, of which somewhat over an inch lies exposed in the right margin of the gastrohepatic ligament, the remainder lying behind the second portion of the duodenum and between it and the pancreas. It is the latter portion which is so intimately associated with the etiology of the pancreatitis from cholangitic affections which extend from the hepatic to the pancreatic ducts.

The blood supply of the gallbladder is through the cystic artery usually from the hepatic, but sometimes from the superior pancreatico-duodenal, being then liable to accidental traumatism during common duct operations, leading to the belief that the injury is to the hepatic artery, a very different matter. In the same way a large vein occasionally crosses the common duct, and

when injured is often supposed to be the portal vein. The gallbladder has no lymphatic glands and few lymph channels. There is one gland at the junction of the gallbladder and cystic duct, another at the cystic duct into the common duct, and a small number closely associated with the common duct. Murphy has especially called attention to the influence of this peculiar lymphatic drainage on the systemic effects of biliary infections. The nerve supply is most interesting. Lennander showed that the abdominal viscera had no sensation, but that the parietal peritoneum was exquisitively sensitive. There is one exception to this rule; Jonas has pointed out the branches which pass from the four lower dorsal and two upper lumbar nerves along the diaphragm. The terminal filaments pass to the common and cystic ducts and neck of the gallbladder, accounting for the deep median line pain of the colic and the attendant spasm of the diaphragm.

Gallstones are the result of cholecystitis. The bacteria probably reach the gallbladder through the bile current (Lartigau) rather than by an ascending infection from the duodenum by way of the common duct. The portal radicals constantly carry organisms to the liver, and those not directly destroyed are excreted with the bile. The majority of people subject to gallstones have had mild attacks of cholecystitis at various times before the formation of stones, as shown by Musser. This observation we have been able to confirm in a large series of cases.

First stage.—The diagnosis of gallstone disease is based on the colic. The patient is seized with a severe cramping pain in the midline, just beneath the ensiform cartilage, the pain radiates usually to the right, but occasionally to the left. It may pass through to the back or up through the sternum. The typical colic lasts from a few minutes to several hours, and is relieved suddenly by nausea and vomiting or a feeling of movement of gas in the bowels, unless cut short by anodynes. There is no quickening of the pulse nor elevation of the temperature. Why? Because the bladder has few lymphatic channels and no glands. The distensibility of the gallbladder relieves tension, so that the attack is over before absorption can take place. The patient, once relieved, feels quite well, eats and digests, and beyond a little rigidity of the right upper rectus muscle has no physical evidence of disease. We may differentiate from appendiceal colic by the fact that the pain is above the umbilicus and radiates upward. Appendicular colic may cause nausea and the pain may centre at the umbilicus on account of its nerve supply being the same as the mesentery of the small intestine. Ordinarily there will, in the latter instance, be an early history of appendicitis, in which the patient will have been confined to bed for several days, and there will usually be found some rigidity of the right lower rectus. The most confusing cases are those in which the appendix lies in the pelvis, but the

pain then radiates downward and often to the left or all over the lower abdomen.

Right renal colic can be differentiated by the pain passing through the loin and being most intense behind and radiating downward to the penis, testicle or ovarian region, with a history of some urinary disturbance. The tenderness to pressure is greatest just below the twelfth rib behind.

The *second stage* of gallstone disease means an obstruction at the pelvis of the gallbladder. The attack may begin as a typical colic, but instead of passing off quickly it is replaced by a tenderness in this region, and a more or less definite tumor of the gallbladder can often be felt. The pulse may quicken a few beats and the temperature rise to 101.5° F. Seldom more and usually less, even with pus present; and why? Because of the lack of lymphatic supply. The only gland available lies beyond the stone. This group must be differentiated from the ulcer of the duodenum with chronic protected perforation, by the history of gastric disturbance, and of dieting to relieve the distress, which so often attends upon ulcer. With cystic impaction the appetite remains good. The former disease is more frequent in males, the latter in females.

The *third stage* comes from the contraction of the distended gallbladder with slow absorption of the fluids. This is often attended with peritonitis, and now, for the first time, we may have a slight, quickly receding jaundice due to interference with common duct drainage from the plastic peritoneal deposits. The case is now typically one of chronic stomach trouble, dyspepsia, etc. There may be recurring attacks of regional peritonitis, but no more distinct colics. Adhesions to the pylorus may interfere with gastric motility, resulting in dilatation of the stomach, etc. This phase of the disease may be differentiated from gastric ulcer by the early history of colic and by the lack of direct connection between food and distress, etc. Occasionally we may have an acute perforation of the gallbladder into the free peritoneal cavity. More often a slow process of ulceration into the colon occurs and temporarily occasions a mucous colitis, or into the duodenum or stomach, causing, perhaps, acute but temporary pyloric obstruction.

Fourth stage.—The stone may pass into the cystic duct and give rise to sudden attacks of fever (temperature 103 or 104°, with chills and quick pulse), lasting a few hours and recurring at irregular intervals of hours or days. This is because the duct is not easily dilated, tension is therefore high, and a plentiful supply of lympathics permits of rapid absorption. The pain is boring and deep-seated and may last for a number of hours or several days continuously as the stone advances. There is often temporary jaundice. The acuteness of the symptoms varies greatly, depending on the distensibility of the gallbladder and its ability to relieve back

pressure and the dilatability of the duct. This stage is the least characteristic of any.

Fifth stage.—The stone passes into the common duct. The symptoms of stone in the common duct depend upon two factors, infection and jaundice. In the acute stage both are present in a varying degree. As a rule the temperature assumes a characteristic malarial curve, chilly sensations and rigors with sudden sharp rise in temperature, lasting a few hours, perhaps, as high as 107, usually 103 to 105°, showing the influence of free lymphatic absorption. Jaundice during the acute stage is present in a varying degree, and with each exacerbation of infection there is a slight increase in the icterus, followed by diminution, changing perhaps once or more in twenty-four hours. It does not follow that subsidence of reaction or clearing up of jaundice means that the stone has passed into the duodenum. In about one-quarter of the cases there is a period of quiesence which may last weeks or months, the only symptoms complained of being gastric disturbance. There is also some loss of weight. The interval is the safe time to operate, and the death rate at this period is probably not above 2 per cent.

Sooner or later there develop changes in the walls of the common and hepatic ducts, and not infrequently in the pancreas. The infection becomes more active, the jaundice increases and there is a more rapid loss of flesh and a progressive anemia. The safe time has passed, and the mortality is from 10 per cent. to 30 per cent. in the last resort operation.

In common duct stone there is seldom a tumor, as pointed out by Courvoisier, although we have seen a palpable gallbladder due to a secondary stone lodged in the cystic duct, causing a tumor of the gallbladder by preventing the escape of the secretions. As a rule, in all duct cases, both cystic and common, there is an unconscious resistance to deep pressure over the upper right rectus muscle during inspiration.

Dividing the pathological condition into stages is merely for the purpose of calling attention to the most common symptoms and the reasons therefore, but is purely artificial.

This brings us to a consideration of jaundice. If it can be said that gallstones have a normal habitat it is in the gallbladder, and therefore entirely apart from the bile current. Jaundice has no part in the diagnosis of gallbladder stone, and when present means a complication arising in one of several different ways :

First, stones in the gallbladder may give rise to cholecystitis, the infection travels to the common duct and produces a cholangitis with jaundice.

Second, a local peritonitis is established and the plastic deposit in the fissure of the liver compresses the common duct and causes jaundice.

Third, a stone impacted in the cystic duct may compress the common duct.

Fourth, the cholangitic infection may extend into the pancreatic ducts, causing chronic pancreatitis and jaundice.

Jaundice from malignant disease has usually the early history of gallstones, and there is apt to have been a prolonged period of quiescence. The icterus is noticed accidentally, as while shaving, is not accompanied by pain, it steadily increases and does not vary day by day in the manner so characteristic of common duct stones. A nodular tumor can usually be felt in malignant disease. Jaundice from hypertrophic cirrhosis of the liver is accompanied by painful attacks, and the great size of the liver is easily demonstrated. Cirrhosis of the liver may produce jaundice, but the alcoholic history and enlarged spleen and ascites, so often present, permits differentiation.

Catarrhal jaundice, so common in young people, has nothing in the examination or history to suggest biliary calculus.

The urine should be carefully examined, although there is nothing characteristic about it beyond the possibility of the presence of bile. Immediately following the attack, examination of the feces may disclose calculi, but this does not often happen. In our experience it is nearly as common for stones (especially large ones) to ulcerate into the duodenum, stomach or colon, as to pass through the common duct, and in either case there are probably others which remain.

Finally, there are a few patients who come to us with severe symptoms in the upper abdomen, so serious that if they had been located in the pelvis or appendiceal region, operative interference would have been instituted at a much earlier period. We may not be able to make a pathological diagnosis, but we can a surgical one, that is, we can demonstrate beyond question that the cause of the symptoms is one of several conditions, all of which are surgical, and, such being the case, operation should be instituted before gross pathological changes make the differential diagnosis more certain, but unfortunately the pregnosis less favorable. It is a question to be decided on its merits, and the patient should be allowed the choice in doubtful cases. We would not, however, advise a reckless resort to the knife for exploratory purposes. We should avail ourselves of all the diagnostic measures to be obtained from the laboratory, from the physical examination, and, beyond all, from the history of the patient ; but it is a false conservation which stands in the way of early operative interference in gallstone disease.—*The Clinical Review.*

Clinical Department.

A Case of Hematoma of the Ovary Simulating an Attack of Appendicitis. Harold W. Wilson, M.R.C.S. (Eng.), L.R.C.P.) (Lond), Senior House Surgeon to St. Bartholomew's Hospital, in *The Lancet.*

The patient, aged 19 years, an unmarried woman, was admitted into President ward, St. Bartholomew's Hospital, on Feb. 11th, 1905, under the care of Mr. H. J. Waring, complaining of abdominal pain and general malaise of two days' duration. She had been in her usual fair state of health up to Feb. 9th. In the afternoon of that day, while sitting at her work, she was seized with sudden colicky pain in the right iliac fossa which lasted for approximately ten minutes. Then the acuteness of the attack wore off, and she was left with a dull aching and a feeling of soreness in the same region, which remained until the date of her admission. This pain was severe and was made worse by direct pressure and by movement. She vomited once at the time of onset and once subsequently in the evening of the same day. She had been more constipated than usual during the preceding week ; otherwise no further symptoms could be elicited. There were no history of any hemorrhage or discharge from the vagina, no pain on micturition, and no pain in the left iliac fossa. She had never had a similar previous attack and had never suffered from "indigestion" or from a purulent vaginal discharge. The catamenia had been regular every twenty-eight days and of average amount. There had been no pain. The last normal period occurred from Jan. 3rd to 6th and had since then been absent.

The patient was seen in the out-patient department and was immediately admitted. When examined in the ward she was lying comfortably in bed on her back with her right leg slightly drawn up. Her general condition was good. Although anemic she did not look actually ill. The tongue was furred and showed no signs of cleaning. The pulse was 112, regular, and of fair volume and tension ; it gradually dropped to 94 on the second day after admission. The temperature was 98.2° F. and remained subnormal throughout. Nothing abnormal was discovered in the thorax. The breasts were not active. The movement of the abdomen was fair, but there was slight restriction in the lower part. No fulness was evident. There were considerable tenderness and muscular rigidity in the right iliac fossa, the most tender point being about two inches below the centre of a line drawn from the right anterior

superior iliac spine to the umbilicus. No actual swelling was felt. On examination the vagina was found to admit two fingers, there being a very small crescentic hymen. No discharge was visible. The cervix was nulliparous, the canal being closed. There was considerable tenderness in the right lateral fornix. Bimanual examination was difficult owing to the patient holding herself extremely rigid. The uterus was normal in position and size. In the anterior part of the right poster quadrant was a rounded, indefinite, elastic, tender swelling, which appeared to be about one and a half inches in diameter and was not continuous with the uterus. Per rectum there was tenderness in the region of Douglas's pouch but no actual swelling could be felt. The leucocyte count was 8000 per cubic millimetre and remained constant.

As regards the diagnosis, the patient was thought to be recovering from what was most probably a slight attack of appendicitis. Except for the continuous subnormal temperature the signs and the symptoms would do very well for the acute catarrhal form, occurring in a "south-east" appendix. But bearing in mind the missed period the possibility of an ectopic gestation was discussed, the symptoms fitting in with what would be expected in the case of an unruptured tubal pregnancy into the sac of which a small hemorrhage had occurred. In these circumstances, after a couple of days' obeservation, it was decided to operate at once and not to risk any further delay. The abdomen was opened by an incision rather lower than the usual appendicectomy one, the mucles being divided in the direction of their fibres. The appendix was found lying in the "south-east" position and appeared to be quite normal, except that at its tip it was attached to a swelling in the pelvis by a recent adhesion. In, and projecting from, the upper and back part of the right broad ligament was a globular purplish swelling about two inches in diameter. It was extremely tense and contained fluid. The tumor was identified as an enlarged right ovary over the apex of which ran the right tube with its fimbria ovarica attached to the swelling. A good pedicle was obtained, transfixed, and the tumor was removed ; in so doing, however, the ovary ruptured and about one ounce of dark fluid blood escaped. The left ovary feeling normal the abdomen was closed. The patient made a good recovery.

The ruptured specimen on being hardened quickly contracted down to the shape and size of an ordinary ovary. Continuous sections showed the normal ovarian stroma to be infiltrated with blood and at one edge of the hematoma a mass of lutean tissue was seen. No trace of chorionic villi could be discovered.

During the last two years five somewhat similar cases of ovarian hemorrhage coming on at or about the time of a menstrual period have been admitted into this hospital. In two of these cases the

gland was found actually ruptured and there was a mass of blood in Douglas' pouch, giving rise to a localised peritonitis. These cases are of interest as once more illustrating the extreme importance of carefully going into a woman's menstrual history in cases of attacks of acute abdominal pain, even though the pain be not within the limits of the "genital sphere." Occasionally cases are seen closely resembling in many respects an acute abdominal condition, such as a perforated gastric ulcer. But on examination it is found that the patient is menstruating and if she is put to bed and kept at rest the condition, whatever it may be, completely clears up in a week or ten days.

I am indebted to Mr. Waring for his kindness in allowing me to publish this case.

Strangulated Femoral Hernia in a Man of Seventy-five—Resection—Recovery. CHARLES S. WHITE, M.D., House Surgeon Emergency Hospital, Washington, D.C., in the *Jour. A.M.A.*

The following case presents some unusual features that seem worthy of notice:

Patient.—C. P., aged seventy-five, male, white, farmer, widower, born in Virginia.

Family History.—Parents died, after short illness, of cerebral hemorrhages, but at an advanced age. One brother died of intestinal obstruction, one of sunstroke. Two sisters are dead, but cause of death unknown. Of six brothers, five had acquired hernias. None, except this patient, has been operated on. He has a nephew who is ruptured.

Previous History.—The patient has had the usual infectious diseases of childhood. In 1895 he had cellulitis in his arm, following a wound of the hand, and he was disabled for four weeks. In 1898, he had a mild attack of pneumonia. With these exceptions, he has been unusually well, and until the present time he has been doing farm work every day.

Present Illness.—On May 17th, about 8 a.m., while lifting heavy logs, he had a sharp, severe pain in the right groin, but worked an hour longer. The pain increased and became unbearable so that he was obliged to return to his home, a distance of six miles, a half a mile of which he walked. He noticed the swelling over Poupart's ligament, and was seen by two physicians between 4 and 6 p.m., but neither was able to reduce the mass by taxis. He vomited once during the afternoon and spent a sleepless night. May 18th he was no better, and he was brought to this city. His bowels did not move any time after the initial pain until after the operation.

Examination.—When admitted to the hospital he was unable to walk and complained of pain in the groin; his pulse 90, full and strong, and temperature 97° F. He had not vomited during the previous twelve hours and was not nauseated. Near the lower attachment of Poupart's ligament there was a tumor about the size of a walnut, tense, not fluctuating and without impulse on coughing. It could not be reduced. The external inguinal ring could be felt and the swelling was below it. The skin was not inflamed. The abdomen was slightly distended.

Operation.—The patient was etherized and an incision about five inches long was made parallel and just below Poupart's ligament. The sac was exposed and was found gangrenous and constricted at Gimbernat's ligament. A knife was introduced on a grooved director and the stricture incised and torn sufficiently to release the hernia. The sac contained about two drams of bloody serum and a knuckle of sphacelated intestine. The abdomen was opened through the right rectus, and one and a half inches of ileum removed and an anastomosis made by a Murphy button. A wedge-shaped piece of omentum was excised. The sac was next transfixed by sutures, snipped off, and the stump returned to the abdominal cavity through the femoral ring. Then a radical operation for femoral hernia was done after the method of Bassini; kangaroo tendon was used for the buried sutures. The abdominal wound was next closed with catgut and silkworm gut. The operation consumed one hour and fifteen minutes.

Result.—The patient made a good recovery, sat up on the twenty-second day and left the hospital one month from the day of admission. The button was passed on the tenth day.

Remarks.—Only a very small percentage of hernias in men are of the femoral variety, and the occurrence of rupture in five of six brothers, while only a coincidence, naturally suggests an inherited weakness. In those cases of strangulated hernia in which the active reflex symptoms, nausea and vomiting, are replaced by a quiet, even painless period, we are sometimes deceived and imagine our patient is better. It is a condition which often precedes a fatal termination, and this can not be emphasized too strongly. The surgeon-general's library contains the report of many cases of femoral hernia with complications, but few in which a resection was done in an older patient than in the case here reported.

Traumatism of the Right Kidney. Charles B. Dyde, M.D., Greeley, Colo., in the *Jour. A.M.A.*

History.—G. C. F. came under my care April 28th, 1905. Ten days previously he had been kicked by a horse, in the right lumbar region, while at work in a livery barn. During these ten

days he had been cared for at Kersey, Colo., where the accident occurred. He was prostrated by the force and shock of the injury and for some days suffered intensely. Six or seven days later, as he was feeling much better, he dressed and walked for a few minutes. This was followed by considerable hemorrhage from the bladder, a slight trace of which was observed the day after the injury. As this complication continued, he was removed to Weld County Hospital, where I first saw him. His previous history presented some interesting and noteworthy points. Three years earlier, while in the United States Navy at Norfolk, Va., he had been operated on for appendicitis. Peritonitis and a fecal fistula developed and posterior drainage was made. Later empyema appeared, and this was also drained. Before the integrity of the bowel was restored he underwent a series of six operations. In a year's time he was restored to health, receiving as a legacy an extensive system of adhesions on his right side from diaphragm to pelvis.

Examination.—He was a young man, aged twenty-three, of good development, well nourished, and when not in pain looked well. His condition at this time was marked by severe pain in the right side of the abdomen and very bloody urine; temperature normal and pulse about 80. The right abdomen was very rigid and slightly swollen. The side on a level with and a little anterior to the quadratus lumborum showed the site of the impact, being still discolored.

Hospital History.—During the ten days succeeding his admittance to the Weld County Hospital he showed some improvement, the urine gradually cleared and the pain diminished. Morphia, of which he had been receiving thus far one to two grains daily, was now gradually omitted. The swelling, external to the adhesions, was slightly increased, and the rigidity remained. At this time of apparent improvement, contrary to instructions, he got out of bed and walked as far as the ward lavatory. This indiscretion was followed by a return of both pain and hemorrhage. The pain was very severe, extending from right kidney to testicle, and intermittent in character. He would lie on his right side, knees doubled up, one hand supporting his scrotum. The urine at this time became so bloody that a catheter was frequently required to relieve the bladder. In consultation with Drs. Church and Hughes it was agreed that the renal colic was due to blood clots passing down the right ureter, and that the tumor was probably a sac of extravasated blood. The advisability of operation was considered at this time, but he was strongly opposed to this, his previous experience giving him a strong distaste for the knife. This condition of pain and hemorrhage continued for several weeks, with occasionally a short amelioration of symptoms. As a rule from one to two grains of morphia were required during the twenty-four

hours to control the pain, the amount being gradually increased. By this time he had become thin and very anemic; his appetite was poor and bowels constipated. The tumor was very marked, and the rigidity was extending. The pain while sometimes that of renal colic, was usually a general pain through the abdomen, burning in character, and extending well over to the left side. The temperature presented an occasional rise of a degree or two; the pulse was the same as before, but somewhat weaker. During the first ten days of June, the hemorrhage continuing, his weakness increased, and his condition was rapidly becoming critical. At this time a consultation was held and we decided that operative measures presented the only sign of hope. This conclusion was communicated to him and his consent was obtained.

Operation.—We operated on the morning of June 13, just eight weeks after his injury. Kocher's oblique incision was made, by means of which the kidney may be exposed and, if necessary, removed. After going through the layers of muscle and fascia, instead of perirenal fat or kidney presenting in the wound, we found we had opened a large cavity, which seemed full of blood clots. On removing those most superficial, which were partly organized, we encountered a profuse and active arterial hemorrhage. At this moment the anesthetic, Dr. Weaver, stated that the pulse suddenly increased to 140. Compression controlled the hemorrhage until a number of strips of gauze were tightly packed into the cavity; at the same time strychnine and normal saline solution tided the patient over and prevented death on the table. He lived eighteen hours.

Autopsy.—This revealed what we considered an unusual and remarkable condition. The right kidney, entirely free in the cavity, which contained two quarts of blood clots, was broken into three pieces, retaining not the slightest connection with vein, artery or ureter. We considered that his days had been prolonged by the system of adhesions, which walled off and limited the hemorrhage, and that the gradual stretching and tension of these, as the swelling increased, created a great deal of the abdominal pain.

A Peculiar Case—Perhaps Neurasthenia. WILLIAM HIMMELSBACH, M.D., San Francisco, in the *Jour. A.M.A.*

History.—Woman, aged thirty-five, single. When I first saw the patient, in June, 1903, her condition was that of a pronounced neurasthenic. There was mental depression, irritability alternating with apathy, pain in neck and along the spine, tremor of the hands, occasional twitching of muscles of the face, and dilated pupils.

She had been in bed two weeks. Her previous history was that of a well-balanced, active woman, fond of outdoor recreations of all kinds and passionately devoted to music. Her weight previous to her illness was 135 pounds. Like most neurasthenics, she had an obsession ; hers was that food is injurious. From the relatives the following facts were elicited : She had gradually abandoned all her pursuits, complained of tiring easily, and had lost flesh gradually, until at my visit she weighed but 85 pounds. There were no indications of an acquired neurasthenia through the usual exciting causes, neither was there any family history that pointed to an inherited neuropathic tendency. Examination of pelvic and other organs was negative.

Treatment.—No medical treatment was instituted, but, after gaining her complete confidence through various suggestions, she again took up her former pursuits, and within three weeks developed a voracious appetite, accumulating fat at such a rate that in March, 1904 (a period of nine months), she weighed 240 pounds, an increase of 155 pounds, accompanied by an amount of physical energy that was startling. Any attempt to restrain either her appetite or her movements was met with violent opposition.

Subsequent History.—So she remained till June, 1904, when, just as unaccountably, she stopped eating and the adipose tissue visibly melted away, so that in October, four months later, she dropped from 240 to 135 pounds. Her pulse became feeble and rapid, at times almost imperceptible, requiring considerable stimulation. There was likewise an edema of the feet and legs. Examination of urine was negative. She would take to bed for weeks at a time. In January, 1905, her long-lost appetite reappeared and with an increased voraciousness, mostly confined to cereals and milk. The quantities consumed were simply enormous. I have watched her eat for two hours at a stretch, actually shovelling in the food. To-day she again weighs 245 pounds, an increase of 110 pounds in six months, with every prospect of a still further increase in weight, I trust not in appetite. I am daily looking for a "tack" in the opposite direction. Her mind remains clear.

A Large Hydrocele of the Tunica Vaginalis. C. Lloyd Worrall, L.R.C.P. London, L.S.A., District Surgeon, Barberton, Transvaal, in *The Lancet.*

On May 30th I was called to see a native (at the office of the Commissioner of Native Affairs) who was reported to be "suffering from an extraordinary enlargement of the testicles." Visions of elephantiasis of the scrotum flashed across my mind, but these

were soon dispelled on examining the case. The history briefly was that the tumor had been gradually developing for four years and that it had never given much pain except that on walking there was a general ache. The patient had no recollection of any injury whatsoever to the parts.

I found on examination an enormous scrotal tumor of fairly regular outline, the left side being considerably the larger—it was quite dull all over on percussion and had that elastic feel which strongly suggested fluid. An examination for translucency proved quite negative. There was no impulse on coughing and the spermatic cord could easily be traced to the external rings. The penis was merged into the tumor in such a way that the prepuce alone was in evidence. As I was convinced that the tumor could be no other than an enormous hydrocele I decided to tap it and drew off in all slightly over seventy-eight ounces of fluid. This was contained in two sacs. In the larger one the fluid was dark from what appeared to be disintegrated blood, and in the other sac it was the ordinary straw colored hydrocele fluid.

I venture to report this case as it has one or two points of interest—its enormous size and yet causing little pain or discomfort. Again, it was noteworthy that notwithstanding the fact that this hydrocele had been forming for something like four years and reached such a size, the testicles seemed quite normal in size and apparently showed no sign of atrophy. One would have thought that the abnormal pressure of the fluid would have tended to make these organs degenerate and shrink. Another little point worth mentioning is that this native had come in to see the commissioner to report his wife having run away with another native. What a domestic tragedy could possibly have been avoided had this wretched man thought fit in good time to call in the services of a surgeon.

I regret that I am not in reach of any special work on the diseases of the generative organs and therefore am not able to determine the frequency or otherwise of these enormous hydroceles. I note that Erichsen quotes "that Gibbon, the historian, had an enormous hydrocele, which was tapped by Cline, who drew off six quarts of fluid."

A Freak Case of Appendicitis. Louis L. Nichols, M.D., in the *Brooklin Medical Journal.*

My patient is a newspaper man about thirty years of age. He inherited a nervous temperament, but has been in fair health with the exception of an attack of typhoid fever some six years ago. He recovered from this without complications. There was no history of indigestion or colicky pains preceding his acute attack

of appendicitis, which came on gradually Sunday morning, October 25th, 1904. I saw him first about 7 o'clock the same evening. He had been vomiting all day and his pain was spasmodic in character and distributed over the whole abdomen. There was no distention and no especial point of tenderness. There had been three or four attempts to go to stool, but with little result. There was no irritation of the bladder. The pulse was 100, and the temperature 99°.

With these symptoms I was apprehensive of appendicitis and warned the family as to what to expect. The patient was ordered 1-10 gr. doses of calomel half hourly, to be followed in the morning by magnesia sulphate.

When I saw him on the following morning there was slight local tenderness in the right iliac region, with some distention and rigidity of the right rectus muscle. Vomiting had ceased, but the bowels had not moved. The temperature was 99½° and pulse 106, and of good character. An ice bag was ordered, applied over the tender point, and magnesia sulphate continued till free catharsis was established. My patient had passed a restless night with but little sleep and he had a worried expression. A consultation was advised and held that afternoon with Dr. Walter Wood. During the interval which elapsed between my morning visit and the hour of the consultation the patient's bowels had been freely evacuated and he appeared much better in many ways. The pain had practically subsided; there was very little tenderness or rigidity, the most tender point being well over against the crest of the ilium; there had been no return of the vomiting during the day and the distention was gone; my patient had lost his worried expression, was hungry and wanted to sit up. In fact, the improvement was so marked that I began to doubt the accuracy of my diagnosis. Dr. Wood confirmed the diagnosis, however, but it was believed at this time that we were dealing with one of those catarrhal cases of appendicitis which so often shows improvement after the free use of salines, and that the case would gradually go on to recovery without surgical intervention.

How remote from the actual facts in the case our conclusions were, became evident from subsequent events. To be sure my patient, from this hour, went on to complete recovery, but in a way quite different from what we anticipated. The more severe symptoms gradually abated, the temperature and pulse slowly returned to normal, but in the meantime a mass in the right iliac region became clearly defined. There was slight tenderness to pressure over this mass and indisposition to move about in bed because of the board-like feeling over the region and pain caused by such motion. The patient's tongue did not clear nor the appetite improve as they should do with a case getting well. While I was speculating over the final outcome in a case presenting these unfavorable symptoms, and trying to decide upon the safest course

to pursue, Nature solved the problem for me in a most novel and unexpected manner. One week from the beginning of the attack my patient passed a very restless night, complaining of discomfort and tenesmus in the bowels. In the morning there were several loose stools and in one of them something which attracted the nurse's attention. On examining it I found what appeared to be a very much attenuated appendix about two and a half inches long, with a perforation at the distal end. I submitted the specimen to Dr. Wood and he was skeptical about its true character. I then sent it to Dr. Archibald Murray for examination, and his report follows.

After his auto-operation my patient's recovery was rapid and without complication. The mass in the right iliac region gradually disappeared, and three weeks from the onset of the attack he was perfectly well, and has remained so to this day. Had not a very watchful nurse rescued this appendix from the bed pan we should still labor under the delusion that my patient's anatomy remains intact as it was originally created and that he simply suffered from an attack of catarrhal appendicitis.

This case was rare, but there have been other similar cases recorded. How many unrecorded cases there may have been where a sloughing and unrecognized appendix has passed from the bowel into the sewer we shall never know.

My object in presenting a freak case of this sort was not because of any particular interest attaching to its novelty, but to draw out discussion on the following points:

1. Should we have operated upon my own case at the time of the consultation or subsequently; and can we formulate any safe rule to guide us in the management of similar cases?

2. Should every case of appendicitis be treated surgically and operated upon as soon as a diagnosis can be made, other conditions being favorable?

3. Or should we adopt the expectant plan and treat each case according to the symptoms as they arise?

By which plan can we effect the greatest number of cures?

BROOKLYN, October 9th, 1904.

Dr. L. L. Nichols, Brooklyn, N.Y.

My dear Doctor:—I have made sections from the tissue sent me, but it is absolutely necrotic and refuses to stain. Still, outlines of what were probably once glands, lymphoid elements and a muscular and fibrous coat can be made out and I should not hesitate to call the specimen an appendix. I have put it aside for you. Very truly,

ARCHIBALD MURRAY,

386 Stuyvesant Avenue, Brooklyn.

In his recent work on the "Vermiform Appendix" Dr. Howard Kelly has collected the history of four similar cases.

Bronchoscopy for the Removal of a Collar Button from the Lung. E. Fletcher Ingals, M.D., Chicago, in The *J. A. M. A.*

Patient.—C. D. H. was sent to me May 23, 1904, by Dr. F. W. Wilcox, of Minonk, Ill. He was a man 22 years of age, who had formerly weighed 142 pounds, but who then weighed 107½ pounds.

History.—He told me that fourteen months previously he had accidentally drawn a collar button, presumably of vegetable ivory, into the air passages. He at once felt the sensations caused by it near the upper part of the sternum on a level with the second rib; subsequently he had some soreness in the same place. He expectorated a little blood a few minutes after the accident, and he said that there quickly appeared a peculiar squeak in the breath sounds. Pneumonia developed on the left side within twenty-four hours and lasted for one month. He had coughed ever since. He had sometimes felt something moving up and down in the lower portion of the trachea and a valve-like action with choking for a few seconds. His father stated afterward that the patient frequently had these choking attacks, coming on without apparent cause and without cough. The last time this sensation had been noticed was four months before he came to see me. He said he had been coughing continuously ever since, mostly at night. This was probably due to a change in position of the foreign body. During the summer immediately following the accident he had had an aggravation of the symptoms with daily fever in the afternoon, during which time he had been kept in bed for a week or two. His recovery from that attack had been very slow. When I first saw him he complained of occasional pain in the left side, referred to the second interspace about an inch to the left of the sternum and occupying an area about two inches in diameter. He had felt no pain in any other portion of the chest, except low down on the left side, at the time he had the attack of pneumonia. His previous history was negative. The heredity was good, there being no tuberculosis on either side of the family. He was a twin, and reported that his brother was strong and well.

Examination.—He had been much weakened by his prolonged illness, was pale and very anemic; he had dyspnea on any exertion and had some swelling of the feet. The voice was clear. I found the pulse 120, the temperature 99.6. He complained of coughing a good deal, mostly at night, and said that he raised occasionally a thin sputum of a brick-dust color, but there were only from two to four drams daily. There had occasionally been faint traces of blood in the sputum, but no distinct signs since immediately after the accident. His appetite was good, but digestion only fair; bowels loose, urine normal. There were no abnormal signs in

the nares, but the larynx and trachea were moderatedly congested. The hemoglobin was found to be only 65 per cent. The sputum contained many pneumococci and pus cells, but no tubercle bacilli.

On examination of the chest I found very little movement, with retraction of the left side. The right side an inch below the nipple, measured from 15¼ to 15½ inches, the left from 14½ to 14¾ inches, but there was no change in the line of dullness on changing the patient's position. The patient said he had been aspirated twice about eight months ago, but no fluid had been found. There was dullness on the left side above the second rib, except a small area between the first and second, and flatness below that level all over the lung. The resonance and respiratory murmur were exaggerated over the right side. The apex of the heart was found in the fourth interspace one-half an inch to the left of the mammillary line. On the left side there was bronchovesicular respiration in the supraclavicular region. From the clavicle to the third rib the breath sounds were very indistinct; below this they could not be heard at all. The voice sounds were exaggerated above the left clavicle and they were quite distinct as low as the second interspace; but they were somewhat feebler over the remainder of the left lung than over the right side. The vocal fremitus was absent below the third rib. The heart's action was rapid and regular and the sounds were normal. Posteriorly there was marked dullness at the left apex extending an inch and a half below the spine of the scapula, with absolute flatness below this line. The resonance and respiratory sounds were exaggerated on the right side. There was bronchovesicular breathing at the apex of the left lung though not very intense. On forcible respiration very often breath sounds could be heard as low as the low border of the left lung.

Fluoroscopic examination showed a dense shadow all over the left side, excepting a small area in the infraclavicular region, where the shadow was less marked. I sent the patient to the Presbyterian Hospital and had a skiagraph made, but nothing could be seen, the lung being so dense that even the ribs did not cast a shadow near the roots of the lungs. Three other negatives were taken with similar results.

Treatment.—On the afternoon of May 23rd, assisted by several of the internes, I gave the patient chloroform, and by upper bronchoscopy attempted to remove the button. Although I had previously given the patient one-sixtieth of a grain of atropin, there was still abundant secretion in the trachea and a large amount of expectoration. Indeed, he coughed practically all of the time during the operation, which lasted from the time the chloroform was started until I desisted, in all about two hours. During this time he spat up large quantities of bloody pus, which was only

kept out of my eyes by placing a pane of glass between my face and the bronchoscope. The pus rendered it very difficult to see what I was doing and compelled me to swab out the passages almost continuously. After swabbing out the pus I could only get two or three seconds before he would cough again. This seemed to result from the passage of the bronchoscope into an abscess. The patient took the chloroform so badly that we were not able to keep him profoundly under it, and I frequently touched the bronchial tubes and the walls of the abscess cavity with a solution of cocain, but the amount of pus was so great that it had little effect. In the examination of the left lung I was unable to see the numerous branches of the bronchi that are usually apparent, though I followed one of the branches far down until the bronchoscope was introduced its full length, 33 cm. below the incision teeth. I searched carefully by inspection and palpation with a small hooklet but was unable to locate the foreign body. There was considerable granulation tissue about the bifurcation of the trachea that for some time interfered seriously with the inspection, and one mass presented the appearance of a small polypus which nearly filled the bronchoscope. I had not yet been told of the peculiar choking spells, and, therefore, did not have in mind anything of a polypoid natu.e in that region. The mass that I saw I did not dare to remove, fearing that it might be connected with the bronchus in such a way that I would open through the tube and cause a pneumothorax. During the operation a part of the time I used for removing the pus a strip of one-inch gauze, which was crowded down the bronchoscope with a large wire, the end of which had been flattened and forked, like that used in the ordinary urine packer. This worked fairly well, but much of the time I used cotton swabs attached very securely to long brass carriers. At one time in swabbing out the pus the sliding ring for fastening the cotton on the carrier caught on the end of the bronchoscope and I had a little difficulty in disengaging it. As the swab was withdrawn I examined it and found the swab of cotton intact, but it seemed to me a little smaller than the others. However, I concluded that this was due simply to its having become saturated with pus. Some time later I discovered at the end of the bronchoscope a white mass which looked like a large swab of cotton. I grasped this with the forceps and withdrew it, thinking it must be a pledget of cotton that had been lost off at the time the instrument caught. Not wishing to direct attention to the interne who had been fastening the cotton on the carriers, and who, by the way, was one of the best men in the hospital, I simply called his attention to it by a look and threw it aside without examining it. This mass appeared fully twice as large as any of the pledgets of cotton after they had been saturated with the pus, and considering the subsequent history, I am now confident that it

consisted of the collar button surrounded with necrosed lung tissue.

Result and Subsequent History.—During the operation the patient's pulse varied from 110 to 150, but all the time was fairly full and regular. Immediately afterward he appeared to be doing well. The next day there was no temperature and the patient said he felt fine. Two days later he was discharged and went to his home in the country. Two weeks later I received a report that he was improving very rapidily, did not cough excepting a few times in the morning, had a ravenous appetite and had gained eleven pounds. A month later another report stated that he was feeding fine and had gained twenty-two pounds. Two weeks later he came to see me so changed in appearance that I did not know him. He coughed very little, indeed, had no pain, no dyspnea on exertion, had a ravenous appetite and weighed 130 pounds. An examination of the left chest showed only slight dullness from the second to the sixth rib, showing that the lung and cleared up greatly from the third to the sixth rib; flatness below the sixth rib, otherwise in front and laterally signs over the chest were much as at the first examination, except that the apex of the heart was found about 1¼ inches to the left of the mammary line. Posteriorly the respiratory sounds were good over the left lung as low as the eighth rib, but feeble or absent below that level. The fluoroscope still showed a shadow over the left lung, but much less dense than formerly.

In response to a letter the patient called on me recently. He said he had been working twelve hours a day since September, had no cough, no temperature, felt fine and weighed 136 pounds. Examination of the chest showed very slight diminution of resonance over the left side as low as the sixth rib in front and laterally, and as low as the eighth rib, posteriorly, with a vesicular murmur in the same region about two-thirds as intense as on the right side. The lung was somewhat contracted and the heart drawn from one and a half to two inches to the left of its normal position. No respiratory sounds could be heard below the eighth rib posteriorly, probably due to drawing upward of the lung and diaphragm. The normal superficial area of cardiac dullness had disappeared over the right half of the lower part of the sternum on account of the increased activity of the right lung and the dislocation of the heart to the left caused by retraction of the left lung. The patient felt perfectly well, and, considering the history, I feel justified in reporting the operation as a complete success, although I did not at the time examine critically the mass that seemed to have been causing the trouble.

Therapeutics.

The Treatment of Ulcerative Colitis.

There has been a notable increase in the number of cases of ulcerative colitis observed in London during the last three years. At one time it was a comparatively rare disease, and on consulting the records of the Westminster Hospital from 1884 to 1902, inclusive, I find there were only fifteen cases. To what the increase is due it is difficult to say; possibly it is associated in some way with the prevalence of appendicitis, or it may be connected with the convalescent dysenteric cases sent home from South Africa. In several of my cases there was a curious, although indefinite, history of contact with people who had suffered from intestinal disease during the war.

The term "ulcerative colitis" is admittedly a bad one, sanctioned only by long usuage, for ulceration of the large intestine may be in origin dysenteric, malignant, tuberculous, or enteric. Much difficulty is experienced in distinguishing between the different forms of inflammation affecting the colon, and *post mortem* it is impossible from an examination of the large intestime alone to differentiate between ulcerative colitis and chronic dysentery.

Ulcerative colitis attacks both sexes, but is slightly more common in men than in women. The majority of cases occur between the ages of twenty and thirty years; exceptionally it may occur in children. The clinical features of the disease are characteristic. The onset is insidious, there is no rigor, and nothing in the early stages to distinguish it from an attack of common diarrhea. Pain is not a prominent symptom, and tormina and tenesmus are absent. As a rule, no cause is assigned by the patient. The temperature is persistently high, varying for many months from 100° to 103° F.; sometimes it is but little elevated, and it is usually subnormal during the last forty-eight hours of life. Diarrhea is always a prominent symptom, and is practically unceasing, there being often from 60 to 100 motions in the twenty-four hours. The motions are liquid and offensive, rarely formed, consisting of mucus with or without blood. Microscopically they show torulæ, streptococci of various kinds, bacilli (the *B. Coli communis* and others), with pus, epithelial cells, and the *débris* of food. Vomiting may be persistent, but is sometimes absent, or occurs intermittently. The tongue is clean, red, and irritable, or covered with dirty brown fur. There is no loss of appetite, and the patient urgently demands more food, in spite of the fact that it increases the diarrhea. Loss of weight is always noted, and is usually at the rate of 3lbs. or 4lbs. a week. There is loss of

energy, and the patient is usually anemic. The anemia, however, is never intense, and even after many weeks of illness the erythrocytes may number over 4,000,000 per c.mm., with hemoglobin 60 per cent. or more. There is no mental depression, and the patient remains bright and cheerful to the end. Bed sores and ischio-rectal abscesses are common, but nothing is found in the liver. The duration of the disease is variable, and may extend over a period of three or four years.

The *post mortem* appearances present considerable uniformity, and there is always a condition of ulcerative colitis throughout. In the ascending and transverse colons, numerous circular punched-out ulcers, varying in size from a threepenny piece to a florin, are seen. The mucosa of the colon from the splenic flexure to the anus is extensively ulcerated, the remaining mucosa being much thickened and standing well up above the ulcerated surface.

Not infrequently the appendix is involved, and it may be glued to the pelvic brim by adhesions or may contain fecal calculi.

Medical treatment commonly fails to do any good, not even ameliorating the symptoms. In a series of cases under my care, the following modes of treatment proved inefficacious: (1) Opium and morphine in all forms given by the mouth, hypodermically, or in enemata; (2) carbinate of bismuth in large doses up to half an ounce every four hours; (3) salicylate of bismuth; (4) astringents, including perchloride of iron, sulphate of copper, and acetate of lead; (5) intestinal antiseptics, including *B.* naphthol, salol, and various preparations of formic aldehyde; (6) ipecacuanha given dry and with the usual precautions; (7) sulphate of magnesium and sulphate of quinine given alternately.

Surgical treatment has been attempted, but the results are not satisfactory. The operation commonly performed is that of establishing an anastomosis between the ileum and the lower end of the colon, or failing this, a right-sided colotomy. In one of my cases Mr. Walter Spencer attempted catheterisation of the appendix, washing out the bowel freely from above with douches of normal saline. The result was unsatisfactory, but it is possible that if it had been performed earlier it might have been successful. The only method of treatment I have found efficacious is the injection by the rectum of argyrol—a chemical combination of silver with synthetic vitellin containing 30 per cent. of silver. The following cases are illustrative:

CASE 1.—A man, aged sixty-four years, was admitted into Westminster Hospital on May 28th, suffering from ulcerative colitis. He was born in England; his father was an Englishman, and his mother a native of Calcutta. When a few months old, he was taken to India, and remained there until the age of thirty-six years, when he returned home. Whilst in India his health was perfect, and he had neither diarrhea nor dysentery. About ten

years ago he developed a chronic and intermittent diarrhea, which, during the past twelve months, had been accentuated, the bowels as a rule acting four times in the day and five times at night. He had attended as an out-patient for nearly a year, but the diarrhea continued with unabated severity in spite of much treatment. He had been steadily losing flesh and strength for some months. There was no cough, and no night-sweating.

On admission, and for some days subsequently, the temperature was elevated, varying from 99.4° to 101.8° F. There were usually from five to seven motions in the twenty-four hours, the stools being fluid, fairly copious, slimy, free from blood, and not offensive. There was no vomiting. There was hyperesthesia on deep palpation all over the abdomen. The tongue was clean and moist.

The patient was dieted and given acetate of lead and other astringents, but without benefit, and his general condition was unsatisfactory. From June 5th to 9th inclusive he had twenty-three motions. On the 10th, after a preliminary enema of boric acid, eight grains to the pint, he was given, by means of an irrigation tube of small diameter, a rectal injection of a 1 per cent. aqueous solution of argyrol at a temperature of 80°. When about five pints had been introduced, the patient being in the knee-and-elbow position, attention was called to the fact that a claret-colored, odorless fluid was pouring out of his mouth, a fluid identical in color and appearance with that in process of injection into the rectum. The time from the commencement of the injection was four minutes. There was some nausea, but no retching or vomiting, and the fluid as it flowed from the mouth was received into a clean white porringer. A suggestion being made that it was altered blood, it was examined both microscopically and by the usual tests, but no blood was present. It was examined for bile, and again with a negative result. The patient had taken nothing in the way of food but some tea early in the morning, and subsequently a little milk and bread and butter. The specimen was sent to Dr. Wilson-Hake, at the Westminster Hospital Medical School, who reported that it was a solution of silver not differing apparently from a 1 per cent. argyrol solution with which it was compared.

The patient seemed none the worse for the injection, and had a fairly good dinner. On the following day he had only three motions, and on June 12th the same number. The temperature was normal on the 11th, but on the 12th it rose to 102.4°, falling again in a few hours to normal. From this time there was no return of the diarrhea, the bowels never being opened more than once a day. As a matter of precaution, the injection was repeated on the 14th and 16th, but there was no repetition of the regurgitation of fluid from the mouth. In a few days the patient was able to take meat and potatoes and green vegetables. He rapidly

regained weight, and on July 6th was discharged. He was seen again two months later, and was then perfectly well.

The foregoing case illustrates not only the curative effect of an injection of argyrol into the bowel in ulcerative colitis, but the fact that a fluid introduced into the rectum may be discharged unaltered by the mouth. The evacuation of a substance injected into the rectum in so short a period as four minutes is noteworthy. It may be suggested that there was a short circuit between the rectum and the stomach, but there was nothing pointing to the existence of so abnormal a condition. The occasional vomiting of enemata by hysterical and other patients is not unknown, and many case are recorded. Many years ago Nothnagel reported, as the result of a series of experiments, that anti-peristalsis never occurred in the normal uninjured intestine if no pathological influences were brought to bear on it. The effect was investigated of the injection into the rectum of various fluids colored with carmine, *post mortem* examination showing whether they had been carried higher by any movement of the intestine itself. The best results were obtained with from three to five cubic centimetres of a strong solution of chloride of sodium, but the staining never reached farther than the cecum. Angeraut, in a thesis published in Paris in 1894, affirmed as the result of experimental investigations that the ileo-cecal valve did not always present the adequacy attributed to it by anatomists, and that it might be permeated by fluids introduced into the rectum. Coutani has recorded two cases in which, after injections of large quantities of olive oil into the rectum for the relief of constipation, the patients were seized with eructations and vomiting, the vomiting matter containing oil. Jaccoud mentions the case of a hysterical young woman who, from time to time, vomited motions which were formed, cylindrical, brown in color, and of characteristic odor. Fully realizing the deception often practised by such patients, every possible precaution was taken, but the phenomenon continued. Ten days later the patient contracted enteric fever, dying in the third week, but at the necropsy no anatomical peculiarity was detected, there being nothing observable but the characteristic lesions of the disease. Briguet reports a case in which an enema of coffee was vomited a quarter of an hour after its administration. Experimentally, an injection was given of a fluid, colored blue with tincture of litmus, and in twelve minutes it was rejected by the mouth, having been turned red by the acid of the gastric juice. In a similar manner a saline injection was evacuated by the mouth, and gave the usual reaction with nitrate of silver. Pie mentions a case in which an injection of 150 grammes of almond emulsion, containing ten minims of tincture of opium, was vomited in half an hour, the patient distinctly recognizing the taste of the laudanum. Suppositories even are sometimes rejected by the mouth. Sennest records the case of a girl,

aged twelve years, who vomited a large suppository introduced into the rectum, "dans le temps de réciter un *Pater noster* et un *Ave Maria*." A second suppository secured by a thread was then introduced, but the reverse peristalsis was sufficiently strong to break the cord, and the suppository was vomited with the fragments of thread attached. A third suppository was tried, secured by four strong ligatures, but the result was the same.

CASE 2.—A postman, aged twenty-four years, suffering from ulcerative colitis, was sent to the hospital for treatment on November 16th, 1904, by Dr. H. E. Hewett, of the Medical Department of the General Post Office. The patient stated that eight months previously he had been in hospital at Lewisham, for what was supposed to be enteric fever. Prior to that and for a year or more he had suffered much from constipation. After his acute attack, he remained in good health until four weeks before admission, when he noticed that his motions, which were passed frequently, were fluid and blood-stained. The evacuations soon became more frequent, more slimy, and contained more blood. There was pain in the abdomen, especially after defecation. The appetite remained good, but there was considerable loss of weight, and he was unable to follow his occupation. Patient's brother, who had had recurrent attacks of dysentery in South Africa, had returned home eighteen months previously, and they had occupied the same bed.

On admission, the patient was thin, but fairly well nourished, and of good color. His weight was 8 stone 13 lbs. His daily temperature ranged from 99° to 102°. There were on an average five motions in the twenty-four hours—fluid, and containing much mucus, with some blood, but not offensive. Vomiting was frequent, and there were thirty attacks in nine days. A uniform tympanitic note was detected over the abdomen, reaching on the right side three inches above the costal margin. The urine had a sp. gr. 1.030, was acid, and contained no blood and no albumin. An examination of the blood showed red cells 5,420,000, and white 23.600 per c.mm., with hemoglobin 90 per cent.

The patient was at first placed on fish diet, but, as this increased the diarrhea, he was restricted to liquid nourishment. A mixture of bismuth and hydrocyanic acid with capsules of creosote and carbolic acid failed to effect any improvement. His weight fell rapidly to 7 stone 10 lbs., and his general condition was unsatisfactory.

On November 29th, after two preliminary enemata of boracic acid solution, eight grains to the ounce, he was given a high rectal injection of a 2 per cent. solution of argyrol, diluted with an equal quantity of boiling water. Five pints were introduced by syphonage, the operation lasting nine minutes. Some of the fluid returned, but most of it was retained. The patient vomited after the injection, but there was no argyrol in the vomit. On the 30th there

were four motions and the patient was sick once. On December 2nd the highest temperature was 100°, and there were eight motions, with one attack of vomiting. On the 3rd the highest temperature was 99°, and there were eight motions. After this the patient rapidly improved; there was no more vomiting, and the bowels were relieved only once or twice a day, the motions being formed and free from blood and mucus.

The first chart shows the temperature and general condition of the patient a few days before the injection.

The next chart illustrates the condition a few days after the injection.

The patient made an uninterrupted recovery. From the 8th to the 17th there were no motions and there was no vomiting. The temperature was normal, and he gained weight at the rate of about 8 lbs. a week. He was placed on solid food, with vegetables, and on Christmas Day had for dinner a plentiful helping of turkey and pudding. On December 26th he was able to get up, and left the hospital on January 4th, 1905, apparently in perfect health.

I have had four similar cases in private practice, but of these I have no notes. For the preliminary injection, a solution of borax will be found better than boracic acid, as it is less irritating, and more speedily clears away the mucus.—WILLIAM MURRELL, M.D., F.R.C.P., in the *Birmingham Medical Review*.

Hay Fever and Its Treatment.

Vasomotor rhinitis is due to irritation of the nasal mucosa by pollen, dust, or smoke. Sudden weather changes, neurotic heredity, uricemia and other nasal affections predispose. The affection occurs at all ages in periodic, sudden annual recurrent paroxysms, chiefly in summer and autumn. The symptoms include pricking and stinging sensations in the nose; persistent sneezing and cough; headache, paroxysms of asthma (usually about fourth week), simulating bronchial form and sudden and apparently causeless onset. More or less complete nasal stenosis, due to swelling of mucous membrane; dyshagia, sense of suffocation; epiphora and itching lids; photophobia, insomnia, general irritability and nervousness; there may be slight fever. The secretion is thin and serious (never mucopurulent) and profuse, tending to collect in the lower part of the nostrils. The mucous membrane is greatly swollen, bluish-gray, glassy, opalescent and water logged, as in acute rhinitis, with excessive hyperesthesia, as shown with a probe, particularly at lower posterior part of the septum and inferior turbinate bones. The inferior turbinate bodies are situated higher than normal. The eyes are suffused, and there is often

chemosis and edematous puffing of the eyelids, with lacrymation. As to treatment, Walter F. Chappell recommends cinchonidia in some form. Thornton prescribes extract of suparenal gland, five to ten grains at a dose three times a day. Waugh gives atropine, 1/500 grain every half hour till the secretion is checked. Hollopeter's monograph on the subject may be summarized as follows: Correct any gross lesion (polypi, hypertrophy, deviated septum, etc.), in nasal passages as far as possible. Use daily nasal sterilization, cleansing both nostrils with Dobell's solution, first with hand ball atomizer, then scrub the nasopharynx carefully in every portion, using a curved aluminum applicator or Allen's nasal cotton carrier. Then dry membrane with clean cotton and use freely a mild solution of menthol in liquid petrolatum loosely plugging the nose for a few minutes to retain the oily application. In old, habitual cases commence treatment two or three weeks before date of anticipated recurrence; also correct constipation (with effervescing soda night and morning) and amylaceous dyspepsia (tinct. nux vomica m. x. t.i.d. for poor appetite), and anemia (pills of valerianate of iron, quinine, and zinc). Observe careful diet, tranquil mind and moderate out door exercise, avoiding the direct rays of the sun. A daily tepid bath, followed by vigorous friction of the whole body, is helpful.—*Denver Medical Times, July 1905.*

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ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

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COMMENT FROM MONTH TO MONTH.

The Trustees of the Toronto General Hospital are to be congratulated upon their choice of superintendent, Dr. J. N. Elliott Brown, not long ago returned from the Yukon, where he filled several responsible positions, experience in which only adds to his executive ability to tackle the responsibilities which now lie before him. Our acquaintance, or rather friendship, with Dr. Brown dates back twenty-three years, and though not for all that time has his steady upward course in life been under our direct and constant surveillance, we can say of him, he is deserving of the honor and responsibility which now falls to his lot—and there is both in this position. Nor is he unknown to the medical profession throughout Ontario, for, for several years he was General Secretary of the Ontario Medical Association. When practising in Toronto, seven years ago, he was recording secretary of the Toronto Clinical and Toronto Medical Societies. He has had good hospital training having been a year as house surgeon in

the very same institution over which he has been called to preside besides having been closely associated for several years with the work at St. Michael's Hospital. He was also a faithful worker for a time in medical journalism. Thus his experience and the work of his life to date give him professional, hospital and administrative experience and ability, possessed by few, in the work he now undertakes. "Still waters run deep," and under his quiet, retiring manner will be found the force which, when added to the foregoing qualifications, will fill, in our opinion, the essentials we spoke of in a former number. We desire to wish our old friend the fullest measure of success in this new situation, feeling that with the hearty, zealous co-operation of both management and staff, he will be quite able to fill the position, so long and so ably filled by Dr. O'Reilly—which will be none too easy to fill acceptably on account of his long tenure of office. At the informal reception given to Dr. Brown on the evening of the 26th of July by the trustees, it was pleasant to see the real, genuine feeling of good-will emanating from both management and staff. We wish him all the good success we know he deserves.

A large deputation of medical men, headed by Dr. D. Campbell Meyers, recently had an audience with Premier Whitney, of Ontario. It waited on the Premier and his colleagues in the Government at the instance first, of the Toronto Clinical Society, and second, at the instance of the larger organization, the Ontario Medical Association. The object of the deputation was explained by Dr. Meyers, who first brought the matter to the attention of the Toronto Clinical Society, and subsequently laid it before the Ontario Medical Association. It was to the effect that the profession in Toronto and in the Province desired that wards or pavilions be set apart or constructed in general hospitals for acute mental cases, which plainly should be treated in hospitals and not in so-called asylums. Others who addressed the Premier, were Dr. McPhedran, Dr. J. F. W. Ross, Dr. J. L. Davison, and Dr. N. A. Powell. Mr. Whitney listened carefully to each speaker and promised that the matter would have the very best attention of his Government. His promise may be relied on. The management of the Toronto General Hospital are considering the

advisability of setting apart the residence of Dr. O'Reilly for this purpose. Incidentally, there was one thing of which the Premier did not seem to catch the exact drift. We refer to the word "asylum," as a distinguishing title for institutions designed to treat people adjudged insane. Apparently the Premier thought that to change the name "asylum" to "hospital" for the insane was lacking in force and meaning, and that no good end would be attained thereby. This was not to the point, but rather wandered from it. We do not think the profession requires any such change, but rather that these institutions be classed as hospitals alone, without any reference whatsoever to the illness which brought their unfortunate inmates thither. Why should there be any difference in the name of an institution whose avowed purpose is to look after the mental health of an individual? He is just as much entitled to be cared for in a "hospital" as a man with pneumonia or typhoid fever. Homes for incurables and asylums for insane are equally obnoxious.

The Toronto City Council and Mr. J. Ross Robertson have each contributed $200,000 and $60,000, respectively, to the Toronto General Hospital and the Victoria Hospital for Sick Children. One is a city, the other a citizen, but the citizen gives nearly one-third as much as the corporation for hospital purposes. Mr. Cawthra Mulock gave $100,000, one-half what the city gives; and yet there was some opposition to the city giving. Not probably to the actual giving, but more particularly the manner and the method of giving. There were adherents of the other hospitals, who, seeing the General was going to get something good from the city, desired to share in the prize, forgetting that a good institution long in harness before them, representative of the city, was deserving under the existing circumstances. Why could these not possibly have remained quiet, and let their rival—if they deem it such—profit. As Controller Hubbard would express it, "a good institution brings good in its train." Perhaps, having been generous to the General Hospital, who knows but that the city fathers might remember the others later on. At any rate it is unseemly and very short-sighted, not to say, picayune, for even so-called rivals in hospital work, to attempt to offset favors to a favored institution.

The Ontario Medical Council has decided not to issue proceedings any more, but to have a stenographic report made and filed away to get dust-covered. In case the report ever has to be consulted, it is there. Now, the medical profession throughout this province is entitled to know something about the proceedings of its Parliament. Certainly, to get those proceedings in pamphlet form six months after the annual meeting was not very up-to-date reading. The medical councils of the provinces are important bodies. We in Ontario take some interest in what our Council does; and some like to know what is going on in the other provinces. The public press cannot be relied on to give us this information, as they generally employ "kids," who think more of the parsley than the meat, and so write up the proceedings. We trust provision will be made to have reports supplied for the medical press. In the expense of this, no doubt the medical press and the Council will co-operate.

To us it appears from the over-crowded condition of the medical profession, that the time has come, when in order to elevate the standard of medicine, supplemental examinations should be relegated to history. This does not necessarily advocate a higher standard, but it does advocate the possession of knowledge in all departments, so that students may not pass through the ordeal of examinations piecemeal. There is an examination set; and if a student fears one suhject, he neglects it and comes up for that alone six months later. The practice is an unjust one.

Dr. William S. Fischer, of Waterloo, Ontario, is contributing a series of articles, entitled "Master Minds of Medicine," to these pages, the first of which appeared in our July issue and was upon William Harvey. It is a clear, interesting and entertaining production, of one who in his day did a great deal for the science and art of medicine. As we cannot too often keep before us the example of the great men of the past whose careers furnish enduring precept even as late as these days, therefore, it is, that articles such as this appeal to the young as they do to the old and supply alike information, pleasure and profit. The next one dealt

with in a near issue, will be Sydenham, the father of clinical surgery; and we feel sure that our readers will appreciate this as well as the one which has already been published. Dr. Fischer is the author of a volume of verse, "Songs by the Wayside," which give expression to beautiful and lofty ideals, and which give splendid promise that their youthful composer will win for himself a name in Canadian literature, a literature, which as yet, is but in its formative period. We desire to express our indebtedness to Dr. Fischer for the privilege and pleasure of publishing these contributions from month to month from his pen.

Two of Canada's leading surgeons have lately been honored with the degree of LL.D. from the University of Edinburgh, to celebrate whose fourth centenary, both crossed the "pond" a short time ago. Canadian medicine will acknowledge the high compliment and honor done to Professor Irving H. Cameron, of the University of Toronto, and to Professor Francis J. Shepherd, of McGill University. Both stand in the front ranks of their profession. Both have attained to the highest honor in the gift of their confreres of the Canadian Medical Association. Both are gentlemen of intellectual capability, of culture and of refinement. We wish to tender both Dr. Cameron and Dr. Shepherd our very warmest congratulations.

News Items.

CANADIAN.

DR. E. M. MIDDLETON, of Fergus, left for London, Eng., on June 23rd.

DR. P. MCGIBBON has returned to Bracebridge and is assisting Dr. Williams.

Dr. B. J. Brandison has moved from North Dakota to Winnipeg, where he will practise in the future.

Dr. F. F. Westbrook, professor of bacteriology in the University of Minnesota, has been visiting in Winnipeg.

DR. D. G. REVELL, of the University of Chicago staff, formerly of Paris, is spending his vacation in Canada.

DR. MULLIGAN has gone to McKellar as a medical practitioner since the removal of Dr. Burrows to Parry Sound.

DR. BARNES, of Pinkerton, has secured the position of assistant to Dr. Hobbs in the Homewood Sanitarium, Guelph.

DR. JAMES RAE arrived from Toronto recently, and is at present assisting Dr. Foote, Rosseau, in his growing practice.

THE Ontario Government has appointed Dr. A. J. Hunter, of Orangeville, an Associate Coroner for the Counties of Dufferin and Peel.

The following are the staff of St. Michael's Hospital for the ensuing year: Drs. G. Chalmers, F. T. Sheehan, Leo Killoran and A. O. Jackson.

The deaths from tuberculosis in Montreal during the past four years were as follows: 1900, 692; 1901, 647; 1902, 664; 1903, 633; 1904, 574.

The death is announced of Dr. J. A. Duchesneau, former Governor of the St. Vincent de Paul Penitentiary, at the age of seventy-three years.

DR. MASON, of Ottawa, an honor graduate of the Medical Faculty of Queen's University, Kingston, is associated with Dr. F. S. Comfort, Campden.

Dr. Swale Vincent, Professor of Physiology in the University of Manitoba, is delivering a course of lectures on the ductless glands at the University of London.

Dr. Donald McMaster, of Sydney, Australia, has been inspecting Children's hospitals in the United States and Canada in the interests of a new children's hospital in Sydney.

DR. W. GIBSON, late of Kingston, is the latest addition to the professional ranks in Smith's Falls. Dr. Gibson has been for some time house surgeon in the Kingston General Hospital.

DR. REID, Wyoming, has leased the office of the late Dr. Harvey, where he has entered upon the duties of his profession. He formerly practised in Watford and has been a successful practitioner for some years.

DR. C. C. FIELD, formerly of Cobourg, Ont., is meeting with deserved success in the West, and we congratulate the doctor on his recent appointment to the position of Professor of Materia Medica and Therapeutics to the Winnipeg Medical College.

DR. BOWLES, of Woodhill, left recently for London, Eng., where he will take a post-graduate course during the summer months. During his absence his practice will be taken by Dr. Jackson, who has been Superintendent of Home for Incurables, Toronto, during the last year.

The Bill to amend the British Medical Act, 1886, has passed the House of Lords. Lord Strathcona in moving the second reading explained that the provisions amended the Act of 1886 without in any way interfering with the principle therein established, which enabled reciprocal arrangements to be entered into either with the Provincial or Federal Governments of Canada.

The British Columbia Medical Association met in Vancouver on the 18th and 19th July, under the presidency of Dr. W. D. Brydone Jack, Dr. H. E. Langis acting as Secretary. The following programme was disposed of: Paper on "Infection and Immunity," by Dr. J. C. Fagan; "An Unusual Case of Intestinal Obstruction," by Dr. R. E. McKechnie; "Clinical Reports with Exhibition of Cases," by Dr. Glen Campbell; "Further Experiences

in the Treatment of Pelvic Disease in the Female Insane" by Dr. Ernest A. Hall; "Import of Relaxed Abdominal Wall in its relation to Diseases of the Digestive System," by Dr. Joseph Gibbs, discussion opened by Dr. Bolton; "An Epitome of a Year's Hospital Work in London, Eng.," by Dr. W. T. Hayes; "On Septic Tanks," illustrated, by Col. T. H. Tracy, M.C.Soc.C.E., discussion opened by Dr. F. T. Underhill; "Vancouver Hospital," illustrated, by G. W. Grant, Architect, discussion opened by Dr. S. J. Tunstall; "Cases of Bilharzia Hematobia in British Columbia," by Dr. R. E. Walker; paper by Dr. J. Hogle; "Case of Congenital Absence of Rectum and Exhibition of other cases," by Dr. Newton Drier; "Observations on Tuberculosis in New Zealand," by Dr. William Stephen; and addresses by visitors of note from American Medical Association Convention at Portland, including Dr. W. J. Mayo, Rochester, Minn. There was an excursion to the Asylum, New Westminster, arranged by the kindness of Dr. Charles E. Doherty, Medical Superintendent.

BRITISH AND FOREIGN.

CANCER RESEARCH AT THE MIDDLESEX HOSPITAL.—The fourth report of the Cancer Research Laboratories of the Middlesex Hospital has just been published under the editorship of Dr. Lazarus-Barlow. The majority of the papers are statistical and are based on the extensive records of the hospital, which alone, among the general hospitals of the metropolis, makes special provision for cases of cancer. Dr. Lazarus-Barlow contributes a paper on Cancer Ages, based on cases admitted to the hospital from 1746 to 1904. The age given is that on admission and probably approximately corresponds with the age at which the patient first observed the growth. The total number of cases comprises 2,073 males and 4,659 females. The following conclusions are drawn: 1. The mean age of the males was 55.2 years; of the females 49.9. 2. Cancer of the alimentary tract is about seven times as common in males as in females, but this difference gradually and uniformly diminishes as the seat of the primary growth is lower in the tract. 3. The mean age of liability of males to cancer of the alimentary tract is 55 years; that of females 52.5 years; but in cancer of the liver and gall bladder the mean age of female patients is higher than that of males. 4. In males 80 per cent. of all cancer affects the alimentary tract; in females 80 per cent. affects the generative organs, including the breast. 5 In both sexes the generative system tends to be affected earliest and the cutaneous system latest; the alimentary system occupies an intermediate position.

6. Cancer before the age of 35 is commoner in women than in men, and in both sexes shows a tendency to affect the generative tract. The second paper is on the sites of cancer and is contributed by Dr. Lazarus-Barlow and Dr. Gordon Taylor. An attempt is made to ascertain whether the general increase in cancer affects every organ or not. The statistics appear to show that an increase in the mortality from cancer has occurred in the alimentary tract, stomach, colon, and rectum and anus in both sexes; in the lip, tongue, floor of the mouth, cheek, and esophagus in males; and in the uterus and breast in females. On the other hand, there was a diminution in mortality from cancer of the lip, tongue, floor of the mouth and vulva in females, and from rodent ulcer and cancer of the skin in both sexes.—*J. A. M. A.*

Special Selection.

SOME NEGLECTED SYMPTOMS OF NON-SURGICAL GYNECOLOGY.

By John A. Hale, M.D., Alto Pass, Ill.

It is but a lack of inquisitiveness on the part of the genera practitioner that has brought about a condition of things in gynecological practice that warrants the assertion so ofen reiterated in current surgical literature, that "Modern gynecology belongs, practically, to the field of operative surgery."

The successful physician, with a characteristic personality of inquisitiveness, can boldly refute such assertions and substantiate his refu'ation by the thankfulness of a happy clientele of womankind released from a thraldom of suffering by his inquisitiveness.

Diseases of the female organs of generation are more common than any but a physician can suppose, and surgical gynecology has become a necessity from an early neglect of backaches, spineaches and headaches, followed by irregular, scanty painful, delayed or suppressed menstruation during girlhood. The inquisitive physician rushes not into instrumental interference, nor sends such patients to certain specialists for officious mutilation, but first a volley of seek-further questions at the patient which elicit the information that such patient passed her days of approaching puberty in an over-crowed public school, or, worse,

in a jail-like boarding school for young ladies, adding fuel to the fire of antagonism between brain and indigestible foods, the body growth lags behind, leaving the imprint of the unequal struggle on the reproductive organs.

With poorly established sexual functions and a perfect disregard for menstrual week, the undeveloped woman leaves school to plunge into a vortex of social dissipation, followed later by an assumption of wifely duties and responsibilities toward a husband who has seen only her bewitching face and not her frail body.

It is hard to fathom the reason why so many such wives at first tolerate marriage obligations and latter resent and loath them when the poor, broken-down sexual system refuses longer to continue functions for which it was made, but carelessly unfitted?

Is not such a condition a cause for dread of maternity on the part of the woman which often leads to criminal abortion, with all its attendant sequences?

To the inquisitiveness of the successful physician must be added a power of positiveness, wherein he may teach both the husband and the wife something they should know before their carelessness brings about these later conditions which require the necessity of mutilation.

The woman suffering from continued nervousness, weariness, wakefulness, headache and backache needs the services of a physician, and not a surgeon. Likewise, such symptoms as scanty, painful, delayed and suppressed menstruation should be under the care of a physician and not an over-zealous surgeon. Prolapsus, leucorrhea, ulcerations, chronic inflammations, congestions and enlargements are purely the outcome of neglect of just such symptoms as named. The first-named symptoms are but the assertions of Nature that she is tired of the unequal load, and if not relieved she will resist no longer, come what will.

A judicious investigation of seemingly insignificant details and close applications to the technique of examination in the early stages of such cases will reveal constipation, congested mucus lining of the vagina and irritable bladder, with diffuse hyperemia of all pelvic structures and loss of organic or respiratory rhythm; that subtle thrill which extends over the whole body synchronous with the beating of the heart and motion of the lungs, plainly perceptible to the trained eye looking upon healthy pelvic viscera. Quick must be the relief of this engorgement, with its pernicious nutrition of the parts and concomitant accumulation of excrementitious matter.

First and foremost in the treatment of this condition comes the remedy of absolute rest to the parts, and then, but no less important, is the removal of improper dress and the re-establishment of

abdominal breathing to restore proper circulation in the pelvic viscera. Treatment for the removal of constipation is self-suggestive; rest we can enjoin upon our patient, and abdominal breathing we may advise, but all animal cells, whether single or united in tissues or in organs, consume a certain amount of matter, and those chemical changes by which material brought to the tissues and organs by the blood and transformed into other products through the activity of the living cells, which liberation of life energy, must be maintained by a continued inherent thrill or respiratory rhythm and a constant supply of chemical products. This same chemical agent must not induct a destructive blood metamorphosis, but supply food for the debilitated vitality. For such action we must seek some combination of the old and well-tried remedies of ergot and apium, with acceptable hemagogues.

The questionable action heretofore exhibited by various preparations of such remedies has been due, as clinically proven, to the component resinous compounds of the apium in the combination. In ergoapiol (Smith) the active principles of apium have been isolated and with ergot made to form an acceptable and agreeable compound with invigorating hemagogues, proving of unquestionable benefit in such conditions as mentioned in this article.

When the general practitioner awakens to his responsibility, we will have less of these conditions, a continuation of which invariably produces a capillary varicosis, with its train of evils, manifested more frequently by copious and disagreeable discharges called leucorrhea. But even as late as in this last-named condition the physician will learn that ergoapiol (Smith) judiciously, consistently and determinedly administered, will prevent much needless mutilation by effecting a cure.

Pre-emption of space for case reports on this subject would scarcely be justifiable, when each reader may cluster the facts as herein stated around well-known principles and evolve therefrom a rational solution of treatment for diseases involving the female genitalia.—*Medical Herald, of St. Joseph, Mo.*

Obituary.

WALTER WILLIAM MEACHAM, M.D.

Mr. Uriah Wilson, M.P., received a telegram recently announcing the death of Dr. Meacham, at Warsaw, Ont. His sudden demise will be a surprise to his many friends and admirers in Napanee and surrounding country, who were unaware of his illness.

Walter William Meacham, M.D., was born at Colborne, Ont., Sept. 22nd, 1841, studied medicine at Dr. Rolph's Medical School, Toronto, and graduated in 1869. In 1870 he married Maggie, only daughter of Geo. Campbell, of Chesley, Ont., and later practised his profession at Odessa. He was first sent to the Legislative Assembly at the general election in 1886, and re-elected at the general elections of 1890 and 1894, as the Conservative candidate. About six years ago the Dr. removed to Warsaw, where he practised his profession.

Dr. Meacham's grandfather was Dr. Seth Meacham, a native of the New England States, and came to Canada about the beginning of last century. He practised medicine in Belleville for many years.

Dr. Meacham was a man of sterling qualities and strict honor, and was able to redeem the old County of Lennox for the Conservatives when it was deemed by many hopelessly lost. He was generous to his opponents, and unlike most politicans, had not an enemy that we ever heard of. Men of the Doctor's high standing are none too plentiful and his removal by death will be a distinct loss to the country and the community in which he had located so recently. The bereaved widow and children will have the sympathy of their many friends here.

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Original Articles.

CANADIAN MEDICAL ASSOCIATION—ADDRESS IN MEDICINE.

THE GROWTH AND ORGANIZATION OF THE MEDICAL PROFESSION IN NOVA SCOTIA.*

By D. A. Campbell, M.D., Halifax.

Mr. President and Gentlemen,—The first duty resting upon me is to thank you for the wholly undeserved distinction which you have conferred in choosing me to deliver one of the general addresses at this meeting of this Association.

I wish to apologize for my presumption in undertaking so serious a responsibility, feeling that local reasons, rather than any fitness on my part, must have counselled your request.

The subject upon which I shall endeavor to address you may be entitled "The Growth and Organization of the Medical Profession in Nova Scotia."

It was not without misgivings that I selected such a local topic, but I have been assured that there are ample precedents for such a course.

It may be confidently stated that there is at the present time a growing interest in the history of the medical profession in all its aspects. This may be regarded as part of the modern

*Read before Canadian Medical Association, Halifax, August 22nd, 1905.

recognition of the important fact that no subject can be thoroughly studied and fully understood unless studied historically. Not only is this fact acted upon by the leaders of modern thought and the great teachers of the age, but it is becoming generally recognized by all thinking men that we must have some knowledge of the past to understand, really, the present and to make progress in the future. Every movement has its past history, its present struggles, its ideals for the future.

The satisfactory condition of the medical profession in this province to-day has not been attained without much effort and a long history.

The present standard of medical education is sufficiently high, and the average attainments of the rank and file of the profession satisfactory, so that everywhere the public can obtain the services of men capable of coping with the ordinary emergencies met with in practice. The members of the profession are respected, and exercise considerable influence in social and public affairs. In their organized capacity they enjoy self-government—a privilege which they have used for the public benefit, but have never abused. There are active and energetic associations for mutual improvement and protection. The grosser forms of quackery are not prevalent, and what may be called "medical heresies" are scarcely represented. It can be affirmed without exaggeration that the position of the profession in Nova Scotia compares favorably with that which obtains in other provinces of Canada or in the states of the American Union. Such a status for the profession has not been achieved except by the continuous struggles of many generations.

It is to the past, then, that we may now turn attention for the better understanding and appreciation of the present. And if, in doing so, I should seem to present much that belongs to general history rather than specially to medical history, my excuse is that it is desirable, if not essential, to note the general condition of the province and its population, at different periods in order to see what field there was for the special work of the profession.

It is now just three centuries since the first European settlement was made in this region of North America, at Port Royal, now Annapolis Royal, in this province, which is, thus the oldest continuous European settlement on this continent north of Florida. The settlement was really made and the colony established by Poutrincourt, under a grant from de Monts, who had arrived there the previous year, 1604, with

a grant, from Henry IV. of France, of all the territory between the 40th and 46th parallels of latitude. The Acadia of the seventeenth century was thus a very wide region, including the present New Brunswick, and, indeed, for a long time, the name Nova Scotia was applied to the same region. Sieur de Monts made many and extensive explorations during the summer, crossed the Bay of Fundy, and established a settlement on the island of St. Croix. The colony of St. Croix suffered great hardships during the winter of 1604-5; and it is from that settlement that we have the earliest account of anything of strictly medical interest in Acadia. That year Samuel de Champlain—a name illustrious in Canadian history—was with de Monts at St. Croix, and he has left a most interesting account of a serious malady which attacked the colonists. Here let me quote part of Champlain's narrative:

"During the winter, many of our company were attacked by a certain malady called the mal de la terre, otherwise scurvy, as I have since heard from learned men. There were produced in the mouths of those who had it great pieces of superfluous and drivelling flesh (causing extensive putrefaction), which got the upper hand to such an extent that scarcely anything but liquid could be taken. The teeth became very loose, and could be pulled out with the fingers without its causing them pain. The superfluous flesh was often cut out, which caused them to eject much blood through the mouth. Afterwards a violent pain seized their arms and legs, which remained swollen and very hard, all spotted as with flea bites; and they could not walk on account of the contraction of the muscles, so that they were almost without strength and suffered intolerable pains. They experienced pain also in the loins, stomach and bowels had a very bad cough and short breath. In a word, they were in such a condition that the majority of them could not rise nor move and could not even be raised up on their feet without falling down in a swoon. So that out of seventy-nine, who composed our party, thirty-five died, and more than twenty were on the point of death. The majority of those who remained well also complained of slight pains and short breath. We were unable to find any remedy for these maladies. A post-mortem examination was made of several to investigate the cause of their malady.

"In the case of many, the interior parts were found mortified, such as the lungs, which were so changed that no natural fluid could be perceived in them. The spleen was serous and

swollen. The liver was woody and spotted, without its natural color. The vena cava, superior and inferior, was filled with thick coagulated and black blood. The gall was tainted Nevertheless, many arteries, in the middle as well as lower bowels, were found in a very good condition. In the case of some, incisions with a razor were made on the thigh where they had purple spots, whence there issued a very black, clotted blood. This is what was observed on the bodies of those infected with this malady. Those who continued sick were healed by spring, which commences in this country in May. That led us to believe that the change of season restored their health, rather than the remedies prescribed.

"During the winter all our liquors froze, except the Spanish wine. Cider was dispensed by the pound. The cause of this last was that there were no cellars under our store-houses, and that the air which entered by the cracks was sharper than that outside. We were obliged to use very bad water, and drink melted snow, as there were no springs nor brooks; for it was not possible to go to the mainland in consequence of the great pieces of ice drifted by the tide, which varies three fathoms between low and high water. Work on the hand mill was very fatiguing, since the most of us, having slept poorly, and suffering from insufficiency of fuel, which we could not obtain on account of the ice, had scarcely any strength, and also because we ate only salt meat and vegetables during the winter, which produced bad blood. The latter circumstance was, in my opinion, a partial cause of these dreadful maladies."

Thus it appears that three centuries ago the French surgeons who accompanied this expedition were impressed with the value of post-mortem examinations for determining the nature of disease, and that they at least suspected the causal connection between salt food and scurvy. And this latter view was confirmed by further observation. After the awful experiences of the first winter at St. Croix, the survivors moved to Port Royal There were still fatal cases of scurvy. By the third winter affairs had greatly improved, owing, no doubt, to the fact that the colonists had taken to hunting and providing themselves with fresh food instead of salt. Champlain reports of this third winter:

"We spent the winter very pleasantly and fared generously, by means of the Ordre de Bon Temps, which I introduced. This all found useful for their health and more advantageous than all the medicines that could have been used. By the rules

of the order a chain was put, with some ceremony, on the neck of one of the company, commissioning him for the day to go a-hunting. The next day it was conferred upon another, and, thus, in succession. All exerted themselves to the utmost to see who would do the best and bring home the finest game."

With the de Monts colonists were several surgeons, some of whom may have fallen victims to the then mysterious disease, before the Ordre de Bon Temps brought fresh game and health to the adventurous little company.

In 1613 the colony of Port Royal was greatly injured by an expedition from Virginia; war between France and England followed; but upon the restoration of peace, in 1632, France was still permitted to hold Acadia.

The work of colonization was resumed under the auspices of the new company of France; some sixty families of farmers, fishermen and artisans were brought over, settling first at La Have, and subsequently at Port Royal. Most of these came from districts on the west coast of France where it was customary to protect the low-lying lands from the encroachment of the sea by dykes, and they adopted the same method, with notable success, to reclaim the rich and extensive marshes about the Bay of Fundy, and soon made comfortable homes for themselves. The progress of colonization was long retarded by internal dissensions, and by strife between the rival claimants to the territory—France and England.

From the final cession of Acadia to Great Britain and the peace of Utrecht, in 1713, to the year 1749, when Halifax was founded, not the slightest effort was made in the direction of securing British settlers for Nova Scotia. France, by the retention of Cape Breton and the fortification of Louisburg, was enabled effectively to checkmate the plans of England. When war broke out between the two nations in 1744, the governor of Louisburg promptly sent an expedition to regain Nova Scotia. Canso was attacked and destroyed, and it was determined to capture Annapolis—which meant the capture of all Nova Scotia. This attempt failed, but it so exasperated the New England people that they resolved to secure possession of Louisburg. A scheme, planned by a lawyer and executed by a citizen commander, with an army of artisans, fishermen, farmers and lumbermen, snatched, by sheer audacity, from the grasp of France the great stronghold of Louisburg, defended by a garrison of veterans. At the close of the war, however, Louisburg, conquered by arms, was restored by diplomacy. A

storm of indignation swept over New England, which had the effect of quickening a plan long cherished by the British government, of establishing a permanent settlement and strong military station on the Atlantic coast of Nova Scotia, as a counterpoise to Louisburg, and Halifax was founded in the early summer of 1749.

Halifax.

A fleet of transports, with 2,576 immigrants, of which 1,546 were adult males, sailed for Chebucto Bay, under the command of Hon. Edward Cornwallis. New Englanders also came in considerable numbers, and contributed largely to the success of the undertaking. The plan of the town was quickly made, building lots were assigned to the settlers, and before winter closed in all were under shelter. A little later a German colony was planted at Lunenburg.

In 1758 Louisburg was captured by General Wolfe, and Quebec in 1759. With British rule thus assured immigrants from New England and elsewhere soon began to flow into the country and to occupy the fertile lands and the best fishing stations, so that by 1770 there was an estimated population of 13,000 in the Nova Scotia of that day.

During the progress of the war between England and the revolted colonies of New England, many adherents of the Royal cause were driven from their homes and sought refuge in Nova Scotia. After the evacuation of Boston about two thousand refugees came to Halifax with the British forces. When the war closed large numbers of Loyalists withdrew from the United States, the greater part settling in Ontario and Nova Scotia. They consisted chiefly of the middle and upper classes, and were an intelligent and enterprising body of men, of sterling character. They diffused themselves quite generally among the older colonists, and also laid the foundation of new settlements in widely scattered parts of the province.

Among the 2,500 settlers who came to found Halifax in 1749 there were twenty-eight medical men. Eleven of the number were accompanied by their familiies, which indicates that they, at least, came with the intention of staying in the country. All, probably, were army surgeons, thrown out of employment at the termination of the war with France, who were thus willing to accept a free trip to America and a grant of two hundred acres of land. How bitter must have been their disappointment when they beheld for the first time an

unbroken expanse of forest, and realized that this was the home upon which they had based great hopes. Some found employment in connection with the hospital which had been established, but this did not last long, as the home authorities complained to Cornwallis that he supported too many surgeons and apothecaries. Only three out of the twenty-eight appear to have had the courage to face such a future. These remained with the other colonists, shared their hardships, and achieved some measure of success. The names of the three were Robert Grant, John Steele, and Alexander Abercrombie. These were the pioneers in medicine in Halifax. Grant became a member of His Majesty's Council; Steele, a member of the House of Assembly; and Abercrombie, when he died twenty-eight years later, was deeply lamented, both for his medical skill and his benevolent disposition. The fate of the other twenty-five is unknown.

Only one physician accompanied the 1,500 German colonists who settled at Lunenburg, and it is uncertain whether he remained in the country. The New England and North of Ireland settlers, who came to the province prior to the Revolutionary War, were usually able to obtain medical aid. The missionaries, who regularly visited the sparsely settled and remote districts, had some medical knowledge. At some points the garrison surgeons looked after the sick. A few physicians came from New England and engaged in practice in the more thriving districts. Of these latter the professional knowledge and skill may not have been great, but they were usually resolute, enterprising men, and useful members of the community in which they lived.

A large number of medical men accompanied the Loyalists. They were well qualified. The majority had served as surgeons during the war, and their influence in improving the status of the medical profession was marked, owing to their number, skill, and strong personality. In respect to the effect of the Revolutionary War on the fortunes of physicians and surgeons, Sabine remarks:

"The physicians who adhered to the Crown were numerous, and the proportion of Whigs in the profession of medicine was probably less than in either that of law or theology. But unlike persons of the latter callings, most of the physicians remained in the country and quietly pursued their business. There seems to have been an understanding that though pulpits should be closed, and litigation be suspended, the sick should not be

deprived of their regular and freely chosen attendants. I have been surprised to find from verbal communications, and from various other sources, that while the 'Tory doctors' were as zealous and as fearless in the expression of their sentiments as Tory ministers and Tory lawyers, their persons and their property were generally respected, in towns and villages where little or no regard was paid to the bodies and estates of gentlemen of the robe and surplice. Some, however, were less fortunate, and the dealings of the Sons of Liberty were occasionally harsh and exceedingly vexatious. A few of the Loyalist physicians were banished; others, and these chiefly who became surgeons in the army or provincial corps, settled in Nova Scotia or New Brunswick, where they resumed practice."

I feel, sir, that this address bids fair to become too long, and there is still much ground to be covered. It seems desirable, therefore, that I should present the chief remaining facts of this subject in a summary form, and for this purpose it appears best to select certain important points, and to group the facts around those dates.

1749-1790.

The first date I have chosen is 1790, as we have an estimate of the population for that year. Prior to that date the population fluctuated very considerably; afterwards it steadily increased. The estimated population of Nova Scotia, in 1790, was about 35,000. The number of practitioners in the province at that time, as far as I have been able to ascertain, after considerable research, was thirty-five, a very large number when we consider the slender resources of the inhabitants and the limited extent of the settled area. The presence of so many practitioners at that early period is explained by the circumstances that fully one-third of the number held permanent appointments in connection with the military establishments at Halifax, Windsor, Annapolis, Shelburne, and Sydney—appointments which they had received as a partial compensation of the losses they had sustained by the Revolution. Their official duties were light, and gave them ample time for general practice. After the founding of Halifax about nine-tenths of the physicians who came to Nova Scotia came from New England, and of the thirty-five practitioners in 1790 fully three-fourths were Loyalists. The latter did much to create that ingrained respect and loyalty towards the profession which is a characteristic of Nova Scotians, and this was accomplished by the

individuality and force of character of those men as well as by their professional skill. The inscription on the tombstone of Dr. John Haliburton, in the old St. Paul's Cemetery, might not unfittingly be applied to each one of them:

> "If unshaken loyalty to his King, steady attachment to his friends, active benevolence to the destitute, and humble confidence in God can perpetuate his memory, he will not be forgotten."

1790-1828.

After 1790 no distinctive event stands out from which we can look back upon the growth of the profession, until the year 1828, when an Act to regulate the practice of medicine was passed by the legislature. During this period of thirty-eight years the population had risen from 35,000 to 150,000—an increase largely due to an extensive immigration from the Highlands of Scotland. The older settlements had made substantial progress, and afforded an improved field for practice. The number of medical men had increased from 35 to 65; but the ratio to population had fallen from one in about 1,000 to one in about 2,300.

Two of those in practice in 1790 still survived—Jonathan Woodbury, of Annapolis, who came to the province as early as 1763, and Joseph Norman Bond, of Yarmouth, a veteran of the Revolutionary War, who enjoys the distinction of being the first medical man to perform vaccination in Nova Scotia. This was in 1802.

The additions to the ranks of the profession, during this period, were principally British graduates, who brought with them the traditions and customs of the profession in Great Britain. Many of them were retired army and navy surgeons, who had seen considerable service, and were accustomed to order, discipline, and regulations. Their personal influence proved a potent factor in improving the status of the profession; their intimacy both with their comrades in active service and with the practitioners of the province became a means of diffusing throughout the country a knowledge of the advances and improvements in our art, at a time when communication was slow and uncertain and professional periodicals were still in the stage of infancy.

During this period a few medical men also came from the United States. About 1800, we note the appearance of native Nova Scotians, who had studied either in Great Britain or in

the neighboring republic. Towards the close of this period there was a decided increase in the number of these. The first Nova Scotians were: Samuel Head, of Halifax, son of Dr. Michael Head, who came from Ireland to the province shortly after 1756; David B. Lynd, of Truro, a graduate of the University of Pennsylvania; Robert Bayard, of Cornwallis, a graduate of Edinburgh, better known in New Brunswick than in his native province; and W. B. Almon, of Halifax, also an M.D. of Edinburgh, and son of Dr. W. J. Almon, who first came to Halifax during the Revolutionary War. All of these were in practice in 1810.

The preamble to the Medical Act and a subsequent amendment point to the presence of a number of unqualified practitioners, especially in districts where medical aid could not be easily obtained. Many of these were men who had gained some knowledge, either through apprenticeship or a partial course at some college. Generally speaking, they were a deserving class, and should not be regarded in the same light as quacks and pretenders.

The early practitioners had to encounter many hardships and difficulties, except in the more populous districts. Many of the roads were mere bridle paths through the forest. Streams had to be forded. Water carriage, when available, was regarded as a boon. In the winter snowshoes were often necessary to complete a journey. Accommodation was very poor; domestic comforts were few; medical periodicals did not exist, and libraries were limited to a few volumes. The serious emergencies of a mixed practice had to be surmounted single-handed. Yet, in spite of all these disadvantages educated men toiled through long years, serving well their generation, and adding their quota to the slow but steady advancement of their profession.

Another point worthy of note is that, owing to the scarcity of educated laymen, and the absence of lawyers outside of Halifax, the doctors also rendered service to the public in the capacity of magistrates, judges of the Inferior Court of Common Pleas, prothonotaries, sheriffs, judges of probate, and they were frequently elected to the House of Assembly. This added to their labor and perhaps their income, and widened the sphere of their influence. It may be affirmed with justice that no other class gave more useful service to the public than the physicians; nor do the best men of the past suffer by comparison with the leaders of to-day; and they have left us patterns of humanity and energy well worthy of imitation.

1828-1854.

The next important step in the progress of the profession was the formation of the Medical Society of Nova Scotia in 1854. This association grew out of, or rather was an expansion of, the Medical Society of Halifax, which had been formed in 1844.

Between 1828 and 1854 the population had nearly doubled, chiefly through natural increase, and the number of practitioners had risen from 65 to 120. An analysis of the list of practitioners in 1854 indicates that more than one-half of them had been born in the province. Of the total number 50 per cent. had been educated in the United States, 35 per cent. in Great Britain, and 17 per cent. were provincial licentiates. During this period the medical supply reached its lowest ebb, because but few practitioners came from abroad, and the cost of a complete medical education in a foreign country was greater than many Nova Scotians could afford. Quackery became prevalent and offensive. The petitions of medical men to the legislature had been disregarded, and the conviction became general that the only way to secure a remedy was by united action; hence the formation of the Medical Society of Nova Scotia.

1854-1872.

The next period, extending from 1854 to 1872, when a new Medical Act of great importance was secured, is characterized by a less rapid expansion of the population, owing to the fact that the era of emigration from the province had begun. But for the people who remained there was a better medical supply.

The new medical society soon made its influence felt. For some years its efforts were concentrated upon safe-guarding the interests of the profession and the promotion of measures to improve the public health. In 1856 the old Medical Act was amended, and new provisions were added to repress unqualified practice. A tariff of fees was framed; a code of ethics adopted; better remuneration for public services was secured; health legislation was improved, and an act for the collection of vital statistics was obtained.

The union of the provinces in 1867 widened the outlook of the profession; and the new order of things was promptly signalized by the formation, that year, of this Canadian Medical Association. And here permit me to refer to the fact that the honor of first presiding over the deliberations of this important

organization was accorded to a Nova Scotian, a gentleman of high standing in his profession, but one whose widely-recognized pre-eminence as a political leader and constructive statesman has caused his professional career to be almost forgotten—I refer, of course, to the Hon. Sir Charles Tupper. And I cannot omit mention of the second president of this association, also a Nova Scotian, and the ablest practitioner in the province, chosen for that place of honor because of his sterling character, public spirit and successful professional career, one who fortunately is still with us, an inspiring influence for all that is noble and good—I refer, of course, to the Hon. Dr. Parker.

In the same year, 1867, the Medical Society of Nova Scotia was reorganized. Up to that time the society had held all its meetings in Halifax. It was then decided to hold the annual meeting at different points in the province, with the view of securing the more hearty co-operation of members in the various parts of the country.

In 1867, also, a medical school was founded in Halifax in connection with Dalhousie College. At first nothing more than a short preparatory course, during the summer months, was aimed at. The venture met with success, and in 1870 it was decided to establish a full course of study and to confer degrees. This project encountered considerable opposition at first, and was not approved by the Medical Society. The supporters of the medical school took advantage of a strong and growing sentiment in the profession in favor of a more prolonged period of study than was required in the schools of the United States, from which the great majority of students obtained a qualification; and they took steps to secure the adoption of a new Medical Act, succeeding in 1872. The existence of a medical school within the province lessened materially the force of the objection raised in the legislature that the cost of a more prolonged period of study would restrict competition, and seriously affect the medical supply of the more sparsely settled districts. The propriety of founding a school at that time has been fully proved by the important part which it has played in promoting and maintaining a greatly improved system of medical education.

1872-1905.

Before considering the Medical Act of 1872, mention may be made of some minor events which have resulted in good. The Nova Scotia branch of the British Medical Association, formed in 1887, which meets at Halifax during the winter

months, and the Maritime Medical Association, formed in 1891, which holds its annual meeting alternately in the three capitals of the Maritime Provinces, have greatly promoted harmony and good feeling, as well as mutual improvement. The *Maritime Medical News,* founded in 1888, has been of material benefit to the various associations by preserving in an accessible form a record of their proceedings, and of their more valuable contributions.

The medical legislation in 1872 is of so much importance that I trust you will pardon me for giving an account of various steps leading to it. By medical legislation I mean, of course, enactments designed to regulate the study and practice of medicine, it being generally conceded that the state has full power in this respect. The basis of medical legislation is the necessity of affording protection to the people against ignorant persons and pretenders. The intention of such legislation is to secure a standard of professional education to be exacted of every one who is desirous of engaging in the practice of medicine, and such standard is obtained in various ways needless to specify.

The first step was taken while the military element in the profession predominated, and was perhaps suggested by the Medical Acts of Upper and Lower Canada. The Medical Act of 1828 is very brief, and is entitled "An Act to Exclude Ignorant and Unskilful Persons from the Practice of Physic and Surgery." Its substance is as follows: No person shall demand or recover any fee or award for medical or surgical aid unless he has a diploma from some college legally authorized to grant the same, or of having been examined in respect to his professional capacity by judges to be appointed by the Governor-in-Council. The Act being simple in character and adapted to the wants of that period, had some influence in restraining irregular practice, and it afforded partially instructed and deserving men already in practice a chance to obtain a legal qualification.

Next came the Act of 1856, promoted by the Medical Society of Nova Scotia. It provided for the registration of qualifications in the office of the Provincial Secretary. In addition to being unable to recover fees for services, unregistered persons were prohibited from holding provincial medical appointments, and were also liable to a fine of £5 for practising. Persons with defective qualifications could still become duly qualified by passing an examination before a board of examiners. This Act, like the previous one, was moderate in its provisions, and free

from objectionable features. It remedied some defects which practical experience had shown to exist in the former measure.

The Act of 1872 conferred the privilege of self-government, as its provisions secure to representatives of the profession full control of all matters relating to medical education, registration and discipline. The Act has since been frequently amended, but its essential features remain unchanged, and as they are similar to those of other provinces, further explanation is not necessary. But the composition of the governing body and its policy in respect to some questions demand brief consideration.

The profession as a whole is not incorporated in Nova Scotia, as it is in Ontario. The Act makes provision for a body corporate, called the "Provincial Medical Board," consisting of thirteen qualified medical practitioners, of not less than seven years' standing—seven to be appointed by the Governor-in-Council for life, and six to be elected triennially by the Medical Society of Nova Scotia. No other provision is made for collegiate representation, and there is no annual tax as in other provinces, the revenue being obtained wholly from examination and registration fees.

Until quite recently the requirements for registration differed in one important respect from those in other provinces, inasmuch as submission to a professional examination was not required from holders of diplomas from reputable schools, obtained after a sufficient course of study. Instead of examination the board insisted upon a rigid compliance with all its regulations relating to the preliminary examinations, period of study, and course of study—tests which effectually excluded applicants from schools of doubtful repute. This policy enabled the board, while maintaining the status of the profession, to keep an "open door" for licentiates from other provinces—a courtesy which so far has met with no reciprocal recognition. At the same time honest men from schools of good repute were spared "vexatious penalties of mind and body."

The principle of state examination was adopted a few years ago, not through conviction of its merits or necessity as a test of professional fitness, but from a desire to co-operate with other provinces in a general scheme of reciprocity. For the past three years an examination in the practical subjects has been demanded from all applicants for license, and the day is probably not far distant when the policy of the board, in this respect, will be adopted by other provinces, as it is now very generally recognized that medical boards and councils have not the requisite

equipment, and can scarcely provide competent and independent examiners, to conduct examinations in the scientific subjects on the lines of the more recent methods of instruction.

The Act of 1872 proved an important factor in causing a diversion of students from American to Canadian schools.

The ever-increasing proportion of Canadian graduates added yearly to the Medical Register is a marked feature of this period, and is worthy of special notice. An analysis of the Medical Register of 1875—thirty years ago—shows that of the whole number of practitioners, 78 per cent. were American graduates, 14 per cent. were British graduates, 2 per cent. were Canadian graduates, and 6 per cent. were Nova Scotia licentiates. A similar analysis of the Register of 1904-5 gives widely different results. Of the whole number, 53 per cent. were Canadian, 44 per cent. were American, and 3 per cent. were British graduates. The change in favor of Canadian schools is still more strikingly illustrated by an analysis of the additions to the Register from 1895 to 1904. Of the number added, 85.5 per cent. were Canadian, 14.2 per cent. were American, and 0.3 per cent. were British graduates. During the year 1904-5 the additions to the Register were exclusively Canadian graduates.

The predominance of the American graduates, numerically, has come to an end, but their influence, always exerted for good, will be felt for years to come; and it is pleasing to observe that the many evils which resulted from a lowering of the standard of medical education in the United States did not sensibly affect the status of the profession in Nova Scotia. This has been due in some measure to our geographical isolation, but chiefly to the circumstance that, from the earliest period down to the present time, the students from this province who went to the United States to obtain a qualification, have almost invariably selected the best schools in Boston, New York and Philadelphia.

The burden of maintaining and improving the status of our guild in this province and throughout our great Dominion is now fairly placed on the shoulders of Canadian graduates.

I fear, Mr. President and gentlemen, that I have rather overtaxed your patience, but trust that I have made it clear that our profession in this part of Canada has had a long and ever-widening history, and hope I have shown, by the citation of definite facts, that the profession in this province has, to say the very least, fully kept pace with the general progress of the country.

"TWO CASES OF NEPHRO-LITHOTOMY."*

By Hadley Williams, M.D., London, Ont.

The object of this paper is a plea for early operation for stone in the kidney.

The weekly journals contain scarcely anything on this subject, yet it is of considerable interest to the profession when we consider that one out of every three cases will die and that an operation, if undertaken early, promises much success. The condition is not so frequent in Western Ontario, but neither is it so rare as we are led to believe. I have two patients operated upon within the year; another who passed a stone of undoubted renal origin; and two other cases, so far refusing operation, who are undoubtedly suffering from renal calculi. Both of my cases were, at one time or another, diagnosed as lumbago, neuralgia, and hysteria (but one would rather believe this to be due to carelessness in the examination of the urine than ignorance on the part of the physician)—yet it must be remembered that there are cases, post-mortem, where a kidney has been found almost totally destroyed by huge, branching calculi, whose presence was unsuspected during life.

Case 1.—I. S., male, age 42 years, farmer. Referred by Dr. Smith, of Aylmer. Complained of a constant, dull aching pain in the right loin with gastric disturbance, increased by exercise or riding in a carriage, becoming on occasions acute and agonizing; a month was the longest interval of peace. This had lasted five years and the patient attributed the trouble to an injury, over the region of the right lobe of the liver, received at that time.

The urine was examined during and after attacks, and always gave, with few modifications, the following analysis: Reaction acid; sp. gr., 1.030; large number of red blood cells; pus; oxalates and urates in abundance. There was frequency of micturation, worse after exercise or jolting, and the average daily amount was 36 ounces. Dr. Smith suspected stone, with which I concurred. During the operation there was great difficulty in bringing the kidney to the edges of the wound for examination. Counter pressure by an assistant was of no value as the organ lay deeply behind the ribs. Only by packing the lower angle of the wound with pads could the kidney by brought down until it rested on the edges of the divided lumbar fascia. It was then thoroughly palpated and a hard substance easily felt. With the aid of a needle thrust into the pelvis from behind, a stone was located lying above

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the entrance of the ureter, but not obstructing it. An incision, parellel with the ureter, was made in the pelvis and the stone removed with forceps. The little finger was then inserted, the pelvis and calices explored, the wound closed with a continuous Lembert silk suture, two strips of gauze and a tube placed in position, and the whole returned. No vessels were tied and no hemorrhage took place. The tube was removed in three days, the gauze on the fourth, urine ceased to come through the wound on the ninth, and complete healing was affected on the twelfth. The average daily amount of urine the week prior to operation was 32 ounces. The first week after, 40; second week, 30; third week, 45. Patient left the hospital in five weeks and made an uninterrupted recovery. A few fleeting pains have been felt from time to time since, but are of no importance and he has increased twenty pounds in weight.

The stone is composed of oxalate of lime, weighed 10½ grains when removed, and 8½ grains when dry, and is about the size of a finger nail.

Case 2.—Mrs. T., female, age 36 years, St. Thomas. Referred by Dr. H. Arnott, of London. Complained of an aching pain in the right side extending across the abdomen, becoming acute and even agonizing with gastric irritation, especially after much walking or riding in a buggy—even after a short railway journey had to rest in bed for some days. Frequency of micturition was marked during the daytime. Gave a history extending over seven years; treated at first for lumbago; six years ago for tubercular trouble in apex of right lung; two and a half years ago a surgeon, diagnosed tubercular kidney; urine examined daily, for ten days, gave an average analysis. Reaction, acid; sp. gr. 1.022; pus; marked quantity of red blood cells. Examination for bacillus of tubercle negative. As the kidney was freely mobile, enlarged and quite easily felt, we decided to operate. The diagnosis of stone by Dr. H. and Dr. D. Arnott was received with some reserve on my part as no crystals were found in the urine, and the case seemed as much tubercular as one of calculous. As guinea pig injection would have taken some time we proceeded with the operation. The kidney was easily found. Its surface showed signs of renal inflammation, was much larger than normal and cystic in the centre. It was brought well up into the wound until it rested on the edges of the lumbar fascia. Palpation gave some evidence of a stone which a needle verified. It was removed through a vertical incision made at the back of the pelvis; with the incision about one ounce of turbid fluid escaped which had formed a cyst of one of the calices above the stone. After the little finger had explored the interior of the kidney in every direction, a plain cat-gut continuous Lembert suture was applied. The drainage and subsequent treatment were similar to the previous case. No

hemorrhage whatever took place. The average daily amount of urine before operation was 17 ounces; the first week after 37 ounces; second, 30; the third, 38. The stone weighed 35 grains, was pear shaped, flattened and very rough, an inch in length and three-quarters of an inch in width, I am not quite sure of its composition. No urine whatever came through the loin, and the wound gradually closed after the fourth day. (Here, then, are two successful cases taken early, before the advance of serious kidney disease.)

The symptoms which lead one to suspect stone are, broadly speaking, two in number: "the character of the pain and the character of the urine." It is obvious that where a renal tumor is present from a hydro- or pyo-nephrosis, or some other condition due to stone, one's attention will be drawn to the kidney immediately. The conditions which simulate renal calculus are many, but, even after investigation, tubercular disease easily takes the first rank and is frequently difficult to differentiate. The urine in both these cases showed an acid reaction, pus, blood, oxalates and urates in the first, no crystals whatever in the last. Quite prominent also were frequency of micturition, more marked during the day, with pain in the loin affected by exercise, and causing considerable irritation of the stomach. A thorough history of a case is of the utmost importance and a systematic examination of the urine, not only during the attacks but for sometime after, for the bleeding may be very minute or even absent altogether. In my two cases the X-ray utterly failed to give a shadow, though the utmost care was taken to obtain one. Uric acid is said to be the only calculi which will, on all occasions, give this test. My own experience is too limited to either assert or deny this statement.

I have also a uric acid calculus passed by a gentleman, age 76 years, who for some time gave a history of stone in the kidney. It is rough, half an inch in length, quarter of an inch in thickness and oval in shape, which was passed under great suffering. Cases where a stone of such a size successfully navigates the ureter are unfortunately rare. The stone that only weighs 8½ grains is the smallest removed from the kidney that I can find in the literature of nephro-lithotomy, except one mentioned by Ia. Cobson in his table of twenty-one cases. After the operation the urine increased in both cases for the first week, lessened the second and increased again afterwards. This immediate increase seems to point to a good workable condition of the opposite kidney, which is of the utmost importance to the life of the patient. The kidney can be better examined if brought well out of the wound and made to rest on the edges of the lumbar fascia, where the surgeon can see every part, and palpate under the best conditions for stones are frequently missed by an incomplete exploration. The opening into the pelvis from behind is associated with no

bleeding, comparable to cutting through the kidney substance, and heals just as readily and perhaps with less danger. Great care is necessary to make the incision "clean cut," and large enough to allow removal of the stone without tearing, so that the edges can be more accurately approximated by the continuous Lembert suture. The hemorrhage from incision of the kidney proper, in some published cases, has been severe enough not only to delay the operation considerably, but even to threaten the life of the patient; though one is aware that there are cases of large, branching calculi, which cannot be removed in any other way. Examination of the pelvis of the kidney by the finger seems a most satisfactory method and its accomplishment quite easy; though, with the needle and the finger combined, a stone is still liable to be missed altogether. The formation of a permanent urinary fistula, so much to be deplored, depends in the main, to whether the ureter is obstructed or free, yet attention to details, such as accurate ligature of the kidney, and early removal of the tube, are of considerable importance. Nephro-lithotomy, if undertaken early, gives excellent results with a minimum of danger to the patient. Neither of these two cases had a bad symptom, which of course, was due more to the favorable condition of the kidney than any particular care on my part. And yet, this operation should not be lightly undertaken and without exhausting every means at the surgeon's command. Dickinson, twenty years ago, gave a mortality of 69 per cent. Recently, Ia. Cobson, in his operative surgery, 14 per cent., the kidney being in various stages of destruction, and of all cases a mistake of over 30 per cent. in diagnosis. There must be more exhaustive examinations of the urine, and the possibility of tubercular disease of the urinary tracts. Agonizing, pain, with blood in the urine to-day, are not sufficient for a nephro-lithotomy to-morrow. To my knowledge, and against my advice, a patient has suffered a large incision in the loin, the lifting of a normal kidney from its bed, and an exploration, for a pain that was evidently hysterical and for blood in the urine, whose only source was the accidental contamination of a menstrual flow. But, when the diagnosis is made, and the patient understands the risks of delay, as well as the favorable chances of recovery (when taken quite early) nephro-lithotomy offers, not alone the only method of relief, but the certainty of much success.

REMARKS ON THE CUTANEOUS AFFECTIONS OBSERVED IN HYSTERICAL PATIENTS.*

By Graham Chambers, B.A., M.B., Toronto.

Hysteria is a neurosis, characterized by mental stigmata, usually of a moral and emotional character, as well as by an almost infinite number of symptoms, the result of nervous disturbances of function of the various organs and systems of the body. These disturbances may be of motor, vasomotor, sensory, trophic, or secretory origin, so that in the symptomatology of hysteria of any organ, one may find symptoms referable to disturbed functions of every nerve tissue taking part in the life process of that organ, and further, the more dependant the nerve tissue upon the psychic centres for its functionating power, the more likely its functions to be disturbed in hysteria.

The skin, on account of its exposed position, offers an excellent opportunity for observing the functionating conditions of the various nerve tissues. In addition, it gives an hysterical individual an opportunity for simulating disease by the production of feigned eruptions, and thus put in play the peculiar dissembling character and morbid craving for sympathy which is always present to a greater or smaller degree in all hysterical persons.

These feigned eruptions, when produced with no ulterior motive, should be looked upon as the outcome of defects of character, and, in a way, should be considered as a manifestation of hysteria.

The cutaneous affections seen in hysteria, and due to the mental condition and functional disturbances of this disease, I have, therefore, classified as follows :

1. *Feigned Eruptians.*
2. *Sensory Neuroses* :
   - (*a*) Hyperesthesia.
   - (*b*) Dermatalgia.
   - (*c*) Pruritus.
   - (*d*) Paresthesia.
   - (*e*) Anesthesia.
3. *Vasomotor Neuroses* :
   - (*a*) Anemias.
   - (*b*) Asphyxia (Raynaud's Disease).
   - (*c*) Gangrene.
   - (*d*) Erythemas.
   - (*e*) Urticaria (including Urticaria factitia).
   - (*f*) Edemas.
   - (*g*) Purpuras.
4. *Secretory Neuroses* :
   - (*a*) Hyperhydrosis.
   - (*b*) Anhydrosis.
   - (*c*) Hematohydrosis.
   - (*d*) Uridrosis.
5. *Trophoneuroses :*
   - (*a*) Alopecia.
   - (*b*) Atrophy and dystrophy of nails.
6. *Motor Neuroses :*
   - (*a*) Cutis anserina, etc.

* Read at Annual Meeting of Ontario Medical Asso., Toronto. June, 1905.

Feigned Eruptions.

As the consideration of the relationships which these affections of the skin bear to hysteria would lead me beyond the limits of this paper I shall limit my remarks to feigned eruptions and some of the forms of neuroses of the vasomotor system. These are eruptions of artificial origin purposely produced with the object of exciting sympathy or of avoiding work. Most of the cases which have been recorded in which the craving for sympathy was the sole object of the patient, have been in hysterical subjects. All forms of lesions that are possible to produce by the application of pigments or irritants to the skin have been observed. These are usually pigmented or erythematous patches, vesicles, blebs or ulcers.

The vesicular, bullous and ulcerative eruptions are usually situated on the trunk and extremities. They can generally be detected by the distribution and characters of the lesions not conforming to any known disease of the skin. The lesions are distributed in some cases symmetrically, in others asymmetrically. When symmetry is attempted it is frequently too accurate. This should make one suspect an artificial eruption. Then again, with regard to the characters of the lesions, one should keep in mind the appearances of lesions formed by common vesicants and caustics, such as cantharides and carbolic acid, as these are commonly used by malingerers. In some instances, particularly if a liquid has been applied to the skin, the lesions have peculiar irregular outlines as if the irritant had run on parts beyond the surface to which it was applied.

This character was well marked in a case of feigned eruption, produced by applying carbolic acid to the skin, that I saw about five years ago. The patient was a young woman, under the care of Dr. J. B. Webster, of Toronto. The eruption was situated on the trunk and extremities. Some of the lesions were large blebs, others almost confluent slightly elevated vesicles, while others again were covered with closely adherent scales, appearances known to everyone who is familiar with the local action of carbolic on the skin. These characters, together with the peculiar outlines referred to above, and the fact that the patient was extremely hysterical, led us to make a diagnosis of feigned eruption.

When pigments are used for stimulating a disease of the skin. the lesions are usually situated on the face, no doubt with the idea of attracting greater attention to the condition. This was the case in a very interesting patient whom I saw in consultation in the fall of 1903. The following are brief notes of the case:

The patient was a young girl who, while attending college in 1900, met with a slight accident, the result of a chair being withdrawn from under her. The disablement was out of all proportion

to the nature of the accident. Immediately after the injury she complained of severe pain in the back and was confined to her bed for three months. During this time, dark patches, like bruises, appeared at intervals on her thighs and trunk. At the end of three months she was able to return to Toronto, but had some difficulty in walking. Shortly after, dark pigmented patches appeared below the eyes, somewhat similar in appearance to those observed after a severe shock. The condition excited great sympathy in her parents and friends. She was sent to several summer resorts to recuperate, and after about three months the discoloration disappeared.

In the following year there was a slight recurrence, but it only lasted for a week or two. In 1903 the pigmentation under her eyes again returned, and the attending physician at that time requested me to see the patient.

On examination the patient presented a very striking appearance. There was marked pigmentation of a blackish hue on both upper and lower eye-lids. On the lower, the pigmentation, which was most intense near the eye lashes, extending well out to the central parts of the cheeks, where it gradually merged into the normal color of the skin. On the sides of the nose, adjacent to the inner canthi of the eyes, the mouths of the follicles, which are frequently somewhat patulous in these positions, appeared as if plugged with a black pigment. This led me to suspect malingering, a suspicion which was confirmed when I removed some of the discoloration by rubbing the pigmented patches with a moist towel.

Naturally I thought of determining the motive in the case, and as a further examination showed the presence of anesthetic areas, vaso-motor disturbances, and other symptoms of hysteria, I came to the conclusion that a desire for gaining sympathy was the object sought by the patient.

Through the kindness of Dr. Walter McKeown, I am able to report another instance of malingering in which pigment was applied to the skin to simulate disease. The following are brief notes of the case:

Two years since, a young woman of decidedly neurotic temperament, then living in an American city, who had been left alone during the absence of the family at church, was found on their return in a state of collapse. Upon reviving sufficiently to talk she stated that a man had entered the house and attempted to assault her. She afterwards positively identified one suspected of the crime and he is at present in prison for the alleged offence. After this she was the object of much sympathy and subject to "spells." These attacks at length came on so frequently that she was sent to Toronto in the hope that the change, remote from the scene of the unfortunate experience would help toward her recovery. In the family with whom she lived here she was the object of constant solicitude, which she repaid by convincing them

frequently by her actions that she was about to die. One night during a particularly alarming attack, Dr. McKeown was called to see her, her friends being unable to reach her regular attendant. The patient presented a ghastly appearance—intensely pale, her eyes wide open and fixed, and beneath them deep black circles, rendered more marked by the intense pallor of the surrounding skin. She was apparently unconscious, although the conjunctiva was sensitive and the pulse regular and normal in frequency. This complex of symptoms suggested hysteria, and as soon as it was found that the pigment could be removed from the eyelids, there was no doubt in the doctor's mind about the diagnosis.

Vasomotor Neuroses of the Skin.

A purely vasomotor neurosis of the skin is an affection due to functional disturbances alone of the nerve vessel mechanism. This may exist in a pure form, as in morbid blushing, and the fleeting erythemas due to excitement or exertion, but it is quite probable that in many of the eruptions placed in this category, trophic as well as vasomotor disturbances are present.

Vascular disturbances are very common in diseases of the skin, both of organic and of functional origin. This, together with the fact that they may be due to an almost unlimited number of causes, makes the determination of the role of hysteria as a causitive factor, a very difficult matter.

Before we can hold hysteria accountable for an affection of the skin, the condition found must be one capable of being produced by functional disturbances, and all other possible causes must be excluded. In addition, there should be present other signs of hysteria, such as the peculiar mental stigmata, anesthetic areas, hystero-genic zones, etc.

Anemias.—The anemias of the skin due to functional disturbances may be general or local. Both forms may be caused by emotions such as shock, fear and anger—the nervous disturbances at the menstrual period are also exciting causes. The lesions of the localized form are usually situated on the fingers, the condition being commonly known as "dead finger." The affected parts become white and numb, and after remaining in this condition for a few minutes return to their normal color. The phenomenon is usually observed in patients suffering from hysteria and allied neuroses. Pathologically the affection is a spasm of the arterioles and capillaries under the influence of the vasomotor system. It is similar in character to the "syncope" stage of Raynaud's disease but clinically it is generally a distinct affection. In some instances of localized anemia the lesions are not limited to the fingers but are situated on the face, back of hands and other parts of the body. I have seen several cases of this variety, though I believe that it is

somewhat uncommon. The following are notes of a case of this form of localized anemia in a patient who was also afflicted with leucoderma: M. S., age 26, housewife. Patient was seen by me, with Dr. Colling, Toronto, on June 2nd, 1903. She belongs to a neuropathic family. She states that both affections appeared when fifteen years of age. For four or five years afterwards the leucodermic patches extended, but the characters of the anemia remained approximately the same. At the present time the leucodermic patches are situated on the neck, trunk and extremities. The face, hands and feet are not attacked. Some of the colorless areas are very large. All are surrounded by pigmented borders. The lesions of the anemia are transient white patches generally situated on the face and hands. They are usually seen at the menstrual period, though strong emotions will cause them to appear at any time. Sensation is impaired and occasionally anesthesia is present in the affected areas. During the time the lesions are on the hands both the arms and hands feel numb. The previous history of the patient and the present condition of her nervous system indicate that the patient is hysterical.

Hyperemia: Congestions.—The hyperemias of the skin, due to functional disturbances of hysteria, may be active or passive. The latter is occasionally seen in hysterical paralysis. Active hyperemia usually takes either the form of morbid blushing or of a fugaceous erythema, which, according to the present system of classification and of nomenclature, would be designated erythema fugax. It is the latter affection on which I wish to report some observations. This form of erythema is characterized by transient erythematous patches and occasionally by reddish papules appearing after emotional disturbances and also, though rarely, after exertion. The lesions are usually situated on the sides of the face and neck, though they may extend to the shoulders and arms, and in rare instances to every part of the body. In the milder forms of the disease, subjective symptoms. other than a slight sensation of heat, are absent, and the lesions are limited to the face and neck. The patients are usually hysterics, or sufferers from neurasthenia, traumatic neuroses, exophthalmic goitre, or other disease in which the vasomotor system is extremely susceptible to irritation. In the severer types of this affection, which are also seen in the same class of patients, the eruption is much more extensive. Like the milder forms, it usually appears on the face and neck, but frequently extends to the shoulders, arms and other parts of the body. Itching is usually present and it is on account of this complaint that the patient sensibly seeks advice. The eruption may be of daily occurrence, in some cases slight exertion, such as moderate exercise, being sufficient to produce it. In the last four years, during which time I have been on the outlook for instances of this eruption, I have met five cases of this severe type of

fugaceous erythema. One was in a girl with marked hysterical symptoms, two were sufferers from exophthalmic goitre, one from traumatic neuroses, while in the fifth I was unable to determine any etiological factor.

Urticaria.—Urticaria is a disorder of the vasomotor apparatus, characterized by evanescent wheals or edematous swellings. In determining the etiology of a case of urticaria, one should seek two etiological factors, one being the exciting cause, the other the predisposition of the patient to the disease. This predisposition appears to be a peculiar irritability of the nervous system, and especially of the vasomotor apparatus. That this susceptibility to urticaria exists is evidenced by the fact that it has shown itself through several generations. The condition is, I believe, of a similar nature to that irritability of the nerve vessel mechanism so frequently seen in hysteria and many other diseases, among which I may mention neurasthenia, traumatic neuroses, chronic alcoholism, poisoning by tobacco, and meningitis. When this condition is present in a marked degree, a slight irritation, as for example, that caused by drawing a pointed instrument over the skin, will produce a wheal or an erythematous lesion, which will not disappear for some time. It is, therefore, quite possible that in many cases of urticaria, particularly in the chronic and relapsing types, these constitutional diseases may take a more important part in the evolution of the eruption than the exciting causes, such as auto-intoxication, ingestion of certain forms of foods, mental emotion, shock, external irritation, etc. In considering, therefore, the relations of hysteria to urticaria, I feel that the hysterical state, either active or latent, is frequently, if not always, a pre-disposing factor, the exciting causes being one of those above mentioned or auto-suggestion. In support of this view I shall report two cases of urticaria in which the nervous disturbances of hysteria appear to be an important etiological factor:

A Case of Urticaria of the Face caused by Exposure to Cold.—The patient, who was a young woman attending college in Toronto, consulted me in the fall of 1903 on account of an eruption which appeared on her face whenever she was exposed to cold air or washed her face in very cold water. She stated that she had suffered from the same complaint during the two previous winters. The eruption, which was limited to her face and forehead, consisted of wheals almost confluent. On inquiring as to her general health, the patient stated that she was given to emotional attacks which, as a rule, she was able to control. The deep reflexes were increased. The sensations of the skin were apparently normal. Mechanical irritation of the skin produced erythematous lesions, which persisted for some time. There were no symptoms of neurasthenia. This case should be looked upon as a case of

urticaria factitia, the exciting cause being exposure to cold. Similar cases have been recorded due to the irritation of heat.

A Case of Chronic Urticaria in an Hysterical Patient.—The patient, a girl about twenty years old, consulted me in November last on account of "hives," from which she had suffered for three months. Family history showed no tendency to neuroses. However, both the previous history of the patient and the present condition of her nervous system indicated that she was hysterical. The lesions of the eruption were similar both in appearance and in course to those of the common form of acute urticaria, but as new lesions appeared daily the course of the eruption had been chronic. The patient did not think that the appearance of the lesions bore any relation to the eating of food, but believed that emotional disturbances always aggravated the condition. The treatment adopted in this case consisted at first in the administration of lime salt and intestinal antiseptics. This did not appear to give any relief. I then, with the idea of exercising a suggestive influence, applied high-frequency currents, using the auto-condensation couch. After the first treatment there was a marked improvement in the condition, and in a week the patient was cured. I suspect that suggestion had something to do with the resolution. I may say that I have heard of cases of urticaria cured by hypnotism.

Edemas.—The lesions of the eruption are edematous swellings, pathologically similar in nature to the wheals of urticaria. The clinical features of hysterical edema are somewhat variable. The color of the lesions may be white, pink, red or blue. In some instances the course of the individual swellings is of long duration as in the case of the blue edema described by Charcot. In other cases, each lesion has a transient history, but by the appearance of new lesions at intervals the eruption may pursue a chronic course. The latter type of the affection is usually described as anti-neurotic edema, or Quincke's Disease. Recently I had under my care a hysterical patient, suffering from this affection, associated with urticaria factitia.

A FEW REMINDERS.

By James S. Sprague, M.D., Stirling, Ont.

"Experience teaches," is an old maxim. Yet, when one obsérves that the best practice is that of the first ten years in rural sections, and that if one continue twenty years longer in the same community, no matter how faultless his work and his morals have been, yet he will note that, whereas he counted friends and patrons by the hundred in the first decade, and probably by fifties in the later part of the second decade, he, in the third decennial period, is fortunate if even by tens he holds or he counts his patrons and friends, and that if experience teaches, certainly, too often, it was the doctor who was taught, and the lesson was a sore one. He learns, too, that to grow up with the town is another fallacy, as far as popularity is concerned, for in the first ten or twelve, even less, years, after his arrival, his popularity was at its height; in fact, in most instances, any young M.D., if any way alive to the credulity of the people, can within one year have all the work he wants in a village. The fresher he is, and the more blunders he makes, will give him a widely honored notice, and greater patronage, which, if taken advantage of by him, would be to his best interest, provided he was wise enough to remain in such a community for ten years, or even less. To practice for a few years in several of the villages or small towns tributary to, and finally settle in, the near metropolis, is most worthy of consideration, and illustrations of the wisdom of such movements can easily be produced. Sometimes I have thought that to follow the example of ministers, who but for three or four years reside in one place, were desirable and decidedly profitable.

However, one fact is this, that to remain more than ten years in one locality, unless it is progressing, and unless one has other interests whereby his living is assured, and prospects are inviting, is a mistake, one too often made. Something new is what the dear people want, and you can, if you are a wise man, give them, in less than ten years, full doses, and very profitably for yourself.

Anyway, it is well to remember that the cake and wine period—in fact, the golden period, as it well may

be termed in practice—is in your first ten years. The wrinkled purse and disappointed hopes will scornfully await you, and which you may hug at your leisure in the third decade, provided you, in the first ten-year dreams in medicine, have not taken advantage of every opportunity, and many there were, that lead to financial success, and the greatest of these opportunities, life-long as a blessing or as a curse, are those that relate to the selection of a proper help-mate—the wife, who, if she possess, in addition to desirable womanly graces, such rare gifts as are required for a doctor's wife and his professional success (not forgetting the value of her possession of a fair bank account); will fill the cup of all that is worth living for, even to the brim, for no greater blessing on earth is there than your wife.

> "And she was beautiful, they said,
> I saw that she was more—
> One of those women—women dread,
> Men fatally adore."

some anonymous writer has said, or named, as the ideal. Such a companion, educated, refined, not given to hypocrisy or deceit, being early selected, no fears of ordinary success and happiness need be entertained, if you act manfully and professionally in the early life.

To revert to the introductory sentence of this article, "Experience teaches," on very close inspection it would appear a fallacy, especially in other iatric considerations not herein named, for too often have we seen the young Dr. Newcome pass the door of Dr. Seuex, to visit an only child, and too often have we secretly admitted that the good-will of Providence has intervened when recovery is established. Would the intelligent father of the said sick child consult the youngest, consequently the least experienced, jeweller, provided his costly watch needed careful regulation? No! He would enquire particularly among his friends who among the oldest jewellers, far and near, was the most capable for the work needed. Yes, experience teaches that many old sayings are very erroneous as to the morals of the doctor.

The nice young doctor, who conducts the Epworth League, or the Christian Endeavor, or temperance society, need not expect to stay long in town, unless he has an income, or is running some side line business, for his co-workers and the church will starve him out. They will give for the blasphemer and the drunkard—will open their doors to him and will uphold him.

In fact, I am led to believe that a good, moral character has no weight, but is a detriment as regards popularity in practice. However, a careful study of the subject compels me to admit the truth of these statements, and which, too, has been confirmed by other observers.

More than five thousand graduates in medicine are yearly sent forth from the medical colleges of the U. S., and they, as our Canadian graduates, commence their life-work ignorant how to legitimately obtain practice; ignorant how to make a living; ignorant of the rules of ethics as relate to medical practice; and ignorant of the principles which relate to their personal and public duty, and of the necessity, while guarding their lawful interests, how to maintain and advance the organized interests of the corporate guild.

Thus, without economic chart or compass, do our young men commence their voyage, and to the ordinary observer it is no wonder so many shipwrecks in life are noted, and how few evidences are afforded that port is being made, unless chance or accident intervene and assist; and no wonder, too, that so many abandon medicine and are on the outlook for governmental positions, which ordinary tailors or cobblers could easily and satisfactorily occupy, if not so honorably. In reference to such interests as are thus presented, the University of Michigan has recently established a most practical course, and as this university was among the first American universities to raise its requirements in time and studies, it certainly is the pioneer in this long-desired and essential establishment of lectures, although "Long is the way by precepts, brief and short by examples" ("Longum iter est, præcepta, breve et efficax per exempla").

These considerations and the recollections of blighted lives by not well calculated marriages, in the history of several confreres is really the occasion of this article, and when I review my own early career and its many false lights and temptations, and to which every young M.D. is, and has been, exposed, the wonder is that so many of us, inexperienced, actually green, have escaped so honorably. My much respected friend, Dr. Mathews, the author of "How to Succeed in the Practice of Medicine," gives much space in his book to this subject.

Here are themes worth considering when subjects relating to medical ethics and kindred interests are being discussed and advocated by our college professors—provided they have ideal wives, and have been country doctors, and can talk from experience, not dreams.

Clinical Department.

The Management of a Case of Prostatic Hypertrophy in an Enfeebled Man of Advanced Old Age. H. McC. Johnson, M.D., of St. Louis, in the *Inter-State Medical Journal.*

Mr. D. S., aged eighty-six, came under my care at Mullanphy Hospital, May 3rd, 1905. He was poorly nourished, markedly senile, and continuously asthmatic. Heart sounds were clear and pulse fairly strong. He was confined to bed most of the time, being able to take only a few steps from the bed to a chair.

About the middle of March, of the present year, he noticed some burning upon urination, with decided frequency, the frequency existing night and day. At times his efforts at urination were ineffectual. These symptoms increased until about a month later when he had complete retention and became entirely dependent upon the catheter. Catheterization was both difficult and painful, making his condition quite unbearable.

Digital examination per rectum showed the prostate to be bilaterally enlarged. The quantity of the twenty-four-hour urine was fairly good and the specific gravity 1.011. There was a small amount of albumen, considerable pus, and some hyaline and granular casts. Dr. Hemplemann, to whom I referred the case for physical examination, considered the asthma to be dependent upon deficient cardiac action.

Here, then, was a very much enfeebled old man to whom catheter life was a burden; as catheterization required the services of one trained in that line, and because of his family circumstances, it became evident that he would have to spend the rest of his life in the hospital if nothing further could be done for him. Operative measures seemed contraindicated on account of his extremely feeble general state, but he preferred to take the chances in hope of relief.

Following the lead of Smith and Telluride, I did an external perineal urethrotomy under local cocaine anesthesia and inserted a catheter into the bladder through the opening for drainage. This caused the patient little disturbance, and he improved somewhat afterwards, so that we were enabled to have him put in a chair and taken on the porch daily. However, we found difficulty in keeping the catheter in place during the night, because

the patient in his sleep would catch hold of it and pull it out. The drainage was done simply as a temporary relief, with the idea that, if the patient improved sufficiently, a complete prostatectomy would be done later. By June 1st his condition seemed to justify further intervention.

Accordingly, on that day he was given just sufficient chloroform to stupefy him, and a finger was introduced through the perineal wound. In a few minutes both lobes of the prostate were enucleated (there was no median lobe). It was surprising how little reaction followed this operation. It seemed to have no deleterious effect on his general condition. Two days later the gauze and tube were removed; there was no leakage of urine from the bladder, and the patient voided urine voluntarily, quite freely at first, but completely emptying his bladder. The operated wound granulated nicely and the bladder symptoms improved, allowing the patient to return home June 14th, thirteen days after the last operation. There remained a perineal fistula. His asthmatic condition was about the same and his general health seemed improved.

At the present writing the perineal fistula has headed. Frequency of urination is somewhat more than normal, twice at night, but is improving, and as the full benefit from prostatectomy is not reached for at least six months after the operation, I expect still further amelioration of the symptoms.

Preliminary drainage of the bladder through a perineal opening I regard as a decided advantage in cases of old men who are too feeble to stand immediate prostatectomy, and do not do well on the catheter. In fact, the danger of catheter life in prostatics is no small consideration. A perineal section may be easily and quickly done under local anesthesia and is followed by a minimum of shock. With a large catheter through the perineal opening in the bladder, drainage is good, and infection and inflammation may be reduced through irrigation, preferably with silver nitrate solution. It gives one time, too, to build up the patient's general condition, and should be employed in emergency cases, at least for temporary relief.

The perineal route is far superior to the suprapubic route for temporary drainage, because it is efficient, there is less shock, less danger of urinary infiltration, less danger of sepsis. It may be done under local anesthesia, which is safer than a general anesthetic.

If the patient builds up and his general condition seems to justify it, a secondary operation may be done. It is not a dif-

ficult procedure to introduce the finger through the cut in the perineum and enucleate the obstructing lobes, nor does it add much to the gravity of the situation. In other words, we do half of the operation of prostatectomy at one sitting, subsequently getting the bladder and patient in condition, and the bladder tolerant of manipulation, later doing the second and last part of the operation.

By fitting a urinal to the perineal tube, as recently practised in a case by Dr. Burnett, often a patient may be quickly gotten out of bed and given the benefit of being up and about in the fresh air. If the patient's condition is too serious to allow of further operative procedure—which is not the rule—we have, at least, relieved him of the pain and difficulty of catheterization, and allowed him to spend the last days of his life in comparative comfort.

It may be said that the Bottini operation is the one of choice for these cases, but the Bottini incision is made necessarily in an infected field without sufficient drainage, and is, to say the least, unsurgical. Moreover, statistics show that not a few serious mishaps follow its use.

On the other hand, the establishment of good drainage from the beginning by perineal section and its lessened dangers, seem to establish it as the operation of choice in these old, enfeebled cases.

Some Remarks on Head Injuries, with Report of Cases.

W. S Wiatt, M.D., East St. Louis, Ill., in the *International Journal of Surgery.*

In the last five years the pendulum of opinion among our leading surgeons has swung several degrees toward the side of immediate surgical intervention in many cases of head injuries. The recognition of the importance of such intervention is our greatest surgical gain in this direction in recent years. It has been frequently observed that the slightest concussion accompanied by only momentary unconsciousness is followed by serious sequelæ, such as intracranial hemorrhage. The conservative treatment of such injuries often results in cerebral abscess, necrosis of brain tissue, epilepsy, intracranial hemorrhage, insanity, which conditions might have been avoided had proper surgical care been given the patient at the time of injury.

We report the following cases of head injury as they present

some especial points of interest and show the necessity for immediate operative intervention, both for diagnostic purposes as well as rational treatment:

Case 1.—Luther ——, colored, while engaged in a crap game was shot by a comrade. He saw him draw his revolver, and, anticipating the danger, threw his head downward and forward, turning the top of his skull toward the muzzle of the pistol. The bullet of 22-calibre entered the skull through the anterior fontanelle, passing a little to the left of the superior longitudinal sinus between the hemispheres of the brain, behind the corpus callosum, striking the inner surface of the occipital bone and being deflected at an angle so that it lodged in the substance of the medulla. The accident occurred at 5 p.m., and the boy was able to walk to my office, a block and a half distant. On arriving at the office I found that he was rational and could answer questions intelligibly. His pupils were widely dilated; he complained of nausea and was faint. The patient was immediately sent to the hospital, but the parents would not consent to any operative procedure until the following day at 11 a.m. Within an hour after the accident Cheyne-Stokes respiration began and gradually became more pronounced and well-defined until death the following day. At 10 a.m. a trephine opening was made, the trephine surrounding the bullet wound in the skull. With a Fluhrer's aluminum probe an effort was made to follow the bullet track to its end; but as the bullet had passed between the hemispheres of the brain it left no track, and no knowledge could be gained of its whereabouts with the probe. There was no hemorrhage, and the post-mortem revealed the presence of the bullet in the medulla. No wound of either hemisphere of the cerebrum nor of the corpus callosum could be found, but a depression of the dura on the inner surface of the occipital bone was thought by the physicians present to be the point at which the bullet struck and rebounded, lodging in the medulla.

This case is remarkable in that the superior longitudinal sinus was not wounded. It also illustrates the difficulty of locating a foreign body in the brain without the aid of the X-ray. We more frequently search for foreign bodies in the brain substance than we find them, and a skiagraph requires a long exposure and the patient is generally in no condition to undergo such an ordeal.

Case 2.—A. G., blacksmith, had been seized with an epileptic fit while in a saloon. The patient was conscious when I

arrived, and gave the following history: Twenty years prior to this date he had been struck on the head with a hammer, causing a depressed fracture of the skull at a point corresponding to the upper end of the fissure of Rolando on the left side. The epileptic paroxysms were general, and not of the Jacksonian variety, as would be expected from an injury in this locality. He was sent to the hospital and trephined over the point of depression. The removed button of bone was not returned, and nothing was put in its place. The dura was opened and adhesions between it and the skull and the brain were carefully separated. No excision of the cortex was made, since the epilepsy was not Jacksonian. The dura was closed and the scalp wound sutured without drainage. The paroxysms did not recur for some weeks after the operation. The first one, appearing the ninth week, was described as being much less severe than those occurring before operation. At the end of the first year the patient said that the paroxysms were fewer in number than they had ever been before. During the second year he declared, when I tried to collect my bill, that the attacks were as severe and frequent as ever. The man was lost sight of at this time. This case is a good illustration of a bad result following the conservative treatment of a depressed fracture of the skull. It also substantiates the doctrine of Victor Horsly that general epilepsy following traumatism cannot be cured by relieving the pressure.

Case 3.—B. S., aged eleven years, on September 1st, 1900, was carrying water to workmen on the Arcade building, when he fell from the first floor to the basement and struck his head on a sleeper. This happened at 5 p.m., and when I saw the patient, fifteen minutes later, he was able to answer questions, but was dazed and unable to tell how the accident occurred or where he was. The patient had the first epileptic seizure one hour after the accident, and a paroxysm about every half hour, lasting from three to five minutes, until operated on at 8 p.m. He bit his tongue and frothed at the mouth during these paroxysms. At 8 p.m. a flap was dissected from the side of the scalp, the incision being entirely within the edge of the hair to avoid leaving a cicatrix in the forehead. A compound, comminuted, depressed fracture of the skull was found, extending from just in front of the ear up through the squamous portion of the temporal bone across the anterior inferior angle of the parietal bone, and through the frontal to a point corresponding to the edge of the hair. The detached piece of bone was driven

into the substance of the brain cortex. There was overlapping of the comminuted fragments at the lower end of the fracture. Since the piece of bone was entirely isolated and great damage had been done to the pericranium, it was decided to be the wisest policy not to replace it, for fear of necrosis following. As the fracture was compound and we were not sure of the wound being absolutely aseptic, we thoroughly cleansed the parts, but did not fill the gap the bone had occupied with anything. The wound was closed without drainage and the patient made an uneventful recovery, leaving the hospital on September 8th, 1900.

Many surgeons advance the idea that if the gap in the skull is not filled by replacing the button of bone, or by sterile celluloid, gold-foil, etc., that adhesions take place between the dura and the brain and the scalp, and cause epilepsy or insanity later. Four years have elapsed since this injury took place and no symptoms have occurred.

Case 4.—Charles S., Laborer, on March 20th, 1899, fell 42 feet down the shaft of an elevator, the fall being caused by the breaking of a scaffold. Patient fell with the left arm against the left side, striking a 2 x 6 feet timber, 7 feet from the bottom of the elevator shaft, and then was thrown violently against the side of the shafe, hitting the side of his head. He was unconscious for a few minutes, and blind for one hour after the accident, but was able to hear voices during that time. There was considerable hemorrhage from the nose, mouth and ears. Deafness was almost complete for three months, and the patient has never been able to hear well with the left ear since the injury. The bleeding from the left ear continued for several days, the flow of blood alternating with a straw-colored fiuid at times. On examination of the nose and ear with specula, no definite knowledge could be obtained, but the persistence of the hemorrhage, followed by cerebrospinal fluid, justified the diagnosis of fracture of base of the skull. The external auditory canal, nose, mouth and pharynx were antisepticized frequently, and the patient made a good recovery, the deafness in the left ear being the only unpleasant symptom remaining.

This case illustrates the difficulty in making a positive diagnosis of fractures at base of the skull, even though straw-colored fluid follow hemorrhage from the ear or nose. This fluid may be cerebrospinal, but only a chemical analysis will differentiate it from blood serum, the liquor Cotunnii, or the fluid from the mastoid cells.

Case 5.—Raleigh ——, aged fourteen, an January 9th, 1902, while trying to jump on a moving coal car, missed his footing, and in falling struck his occiput on the corner of the granite sidewalk. Patient was unconscious for fifteen minutes, and when I arrived, one-half hour after the accident, he was still dazed, with widely dilated pupils, talked incoherently and could give no history of the injury. The boy was immediately sent to the hospital, and on dissecting down a flap, an incomplete depressed fracture was found a little above and to the left of the external occipital protuberance. The fragment of bone on one side was depressed, so that its outer surface was on a level with the inner surface of the skull. It was removed and the scalp wound closed without drainage. The boy made an uneventful recovery, and has had no unpleasant sequelæ.

This case is unique, on account of the proximity of the depressed fracture to the centre for sight in the occipital lobe. If this fracture had been treated expectantly, the patient in all probability would have had hemi-anopsia or half-blindness in the opposite half of both retinæ.

Case 6.—I. S., aged thirty-five, on September 23rd, 1904, while crossing a street-car track was struck by a car. He turned a somersault, alighting on his occiput. He was rational one hour after the injury, and able to recognize friends two days after its occurrence. He then became delirious and remained so until his death. On the morning of the 26th, Dr. Applewhite, his physician, and myself decided to raise a scalp flap and inspect the skull under the site of contusion. We found no fracture of the skull, and as no pressure symptoms were present justifying the opinion that a motor area was involved, we investigated no farther. The patient died on the morning of the 27th, and the post-mortem revealed the following lesions: A contusion over the left occipital lobe involving an oblong area, possibly two inches in its longest diameter. Ecchymoses over the entire area were present. In the parietal lobe of the opposite hemisphere two lacerations were found, the brain substance in and around these lacerations being necrotic. This patient was addicted to the use of alcohol and told me several times within the last few years that he averaged taking fifteen drinks of whiskey per day. With lacerations in this part of the cerebral cortex we would expect some involvement of the motor areas along the fissure of Rolando. No symptoms indicating such involvement were, however, present, the patient using his left arm and leg as well as his right.

This case substantiates the observation of Keen, that a contusion or concussion of any severity is accompanied by laceration of brain tissue. It also illustrates the difficulty in differentiating between coma or delirium due to head injury and coma or delirium due to alcoholism. This case was diagnosed by a good surgeon as one of delirium tremens, he expressing the opinion that the injury was not much concerned in the production of the delirium.

CASE 7.—This case is not reported as one in which a positive diagnosis of head injury, followed by cerebral abscess, was made. There was possibly no relation existing between the injury and the brain compression, but the history is worthy of study. In August, 1904, the patient, a child, fell down the stairs, striking the right side of the forehead just above the eye against the edge of a step. The child was drowsy for two or three hours afterwards, and then resumed its play. Two weeks after the injury, the right ear began to suppurate, the discharge continuing for a few days and then stopping for some days up to the time of the final illness. There was no history of scarlet fever or any of the exanthemata within the last year. During the period that the ear was not discharging the child had fever, was flighty at times and very excitable, easily losing its power of self-control. As soon as the discharge was re-established, these symptoms would disappear. On October 28th, the patient became unconscious. Temperature normal; pulse ranging from 60 to 70; respiration labored; right pupil dilated and fixed; right eyeball bulging; constant movement of the left leg, foot and toes; some movement in the left arm and hand, but not so much as in the foot. A diagnosis of possible cerebral abscess was made, which was confirmed by the consulting surgeon, and it was decided to trephine over the upper end of the fissure of Rolando, as symptoms in the left leg and foot pointed to this as the area involved. When the button of bone was removed the dura bulged into the opening; when the dura was opened the brain bulged. The brain was probed in different directions with a grooved director, but no pus was found. The brain tissue was necrotic or disintegrated to such an extent that a grooved director was carried by its own weight through it. Immediately on incising the dura and relieving the compression, the child's pulse and respiration became better. An opening was also made in the mastoid region, no pus being found in this locality. A post-mortem could not be held. If it had been, I believe it would have revealed the presence of an abscess somewhere in the brain

substance, possibly in the cerebellum. The child began having Cheyne-Stokes respiration a few hours after the operation and continued to have it up to the time of death.

This case, as well as Case 1, substantiates the belief of Horsly, Nicoll, and others, that lesions of the central nervous system produce death by paralysis of the respiratory centre rather than by paralysis of the cardiac centre. Horsly and Nicoll both report cases in which the breathing stopped as soon as anesthesia was begun, artificial respiration being kept up as long as an hour without any effort on the part of the patient to breathe spontaneously. The operators became desperate, opened the skull, and immediately the patient breathed.

Some improvements have been made in the surgical technics of brain surgery in recent years. Keen, in exposing large areas of brain cortex, makes trephine openings, passes a probe from one opening to the other between the dura and the skull, threads the end of the probe with a piece of silk and pulls a Gigli saw through from one trephine opening to the other. In sawing through the skull he bevels the edges of the bone so that the fragment will not become depressed or slip down on the brain cortex when it is replaced.

The application of a pnumatic rubber tourniquet, as suggested by Cushing, just above the ears makes operations on the scalp practically bloodless. The tourniquet must be inflated with air, else pressure neuritis may follow its use.

As to closing the opening in the skull with the fragment of bone removed, or with celluloid, gold-foil, or silver plate, there is much difference of opinion among surgeons. Some contend that either of the three substances named acts as a foreign body and causes sepsis; others that if the fragment of bone be replaced, necrosis and septic infection frequently follow, and that if some substance is not used to separate the brain and dura from the scalp to prevent adhesions between them, these will inevitably take place and cause troublesome sequelæ.

Summary.

First.—All cases of head injury, no matter how slight, are liable to be followed by intracranial hemorrhage, as much as thirty-six days having been known to elapse between the time of injury and the formation of a clot large enough to produce marked symptoms of compression.

Second.—Any case of severe concussion is liable to be accompanied by laceration of brain substance and cerebral hemorrhage.

Third.—Immediate surgical intervention, if there is compression, is the only means in most instances of getting -a clear conception of the conditions present and of remedying them.

Fourth.—Since lesions of the central nervous system produce death by respiratory, rather than cardiac, paralysis, an anesthetic is to be given cautiously in any case of brain compression. Most cases of compression can be operated on after dissecting the scalp flap without anesthesia, since the skull, dura and brain are insensible to pain.

Fifth.—Rigid asepsis is essential to success and the prevention of unpleasant sequelæ in the surgical treatment of any case of head injury.

Therapeutics.

The Obstetrical Binder.

Dr. W. Gilbert Povey, of Cleveland, writes:

In endeavoring to answer this question as it is stated, I shall confine my remarks to *my own personal experience* gained from several hundred cases in both hospital and private practice, and shall *not* quote the opinions of others, as their opinions are not asked, neither shall I refer to text books or reported cases. One of the most salient among the principles of success in the private practice of medicine is to relieve pain and suffering and render the patient as comfortable as the means placed within one's power will permit. Viewing the obstetrical binder in the light of this principle, I believe most heartily in its use. In its universal use? No. for there are many cases where its use would be detrimental, but these are only the exceptions which prove the rule,

The Binder Itself.—This consists merely of a piece of unbleached muslin long enough to surround the abdomen and broad enough to extend from the pubes to the sterum; two pieces of the same material, three inches wide and eighteen inches long, are securely *sewed* to the posterior border (to avoid use of safety pins, upon which the patient would have to lie), so that when the binder is applied they hold it down in position, and, being pinned anteriorly above the pubes, hold the vulvar pads in position. Several of these simple binders should be on hand, so that as one becomes soiled another may be applied.

When Should the Binder be Applied?—It is my custom to apply the binder as soon as the room has been straightened, the bed clothes and night clothes changed, and the patient bathed and rested. In other words, its application completes the obstetrical toilet.

How Should the Binder be Applied?—The proper application of the binder is the most important step in the whole procedure. Upon its proper or improper application depend the avoidance or occurrence of immediate complications, the comfort or discomfort of the patient, and her future good or ill health. To state it briefly, upon its correct or incorrect application depends success or failure.

Method of Proper Application.—Every practitioner of experience knows, if he has used the Credé method of expressing the placenta, how easy it is to place the hand posterior to a recently emptied uterus. The abdominal walls being relaxed and the uterus being sufficiently large to be well above the pelvis, a good sized pad of absorbent cotton or other suitable material is placed

in this artificially produced sulcus, posterior to the uterus, and held in place by the hand of the obstetrician, the uterus is held quite firmly forward and not pushed downward into the pelvis. As this pad is held in place by the hand of the obstetrician, the previously arranged binder is pinned snugly and firmly by the nurse, beginning at the *sternal* end and pinning *downward*, and *not* from the pubic end and pinning upward. The hand of the obstetrician is removed gradually as the binder is applied over the pad, which is thus securely held in position *behind* the uterus, and not on top of it. The nurse completes the pinning over the fundus of the uterus down to the pubes, but not nearly so tightly as was done above. The vulvar pad is placed in position and the two posterior straps are drawn up and pinned anteriorly, thus holding the binder down and the vulvar pads in position. Sometimes two additional straps are needed to hold the binder securely around the hips; these can easily be adjusted. The binder may be tightened as the uterus contracts, and by the tenth day, when the uterus is within the pelvis, the pad may be entirely removed and the binder applied firmly throughout its entire length. A little experience in this simple method of application will soon teach one where to place the pad, how much of a pad is necessary, how to hold it in position behind the uterus, how tight to bind, and how loose to bind.

The advantages of the binder thus applied are:

1. The patient is thus made comfortable. After the uterus has been delivered of his burden, the patient feels, necessarily, a tremendous relief from weight, presure, and distention, and, as many of my patients have expressed it, it is as if *everything* within had passed out; owing to the relaxed condition of the abdominal walls, no one but the patient herself can realize the comfort of support and tone which the binder affords.

2. It stimulates the uterus to contract, thus avoiding in many instances, I believe, the much dreaded post partum hemorrhage.

3. It permits the patient to be moved and turned in bed without the fear that something terrible is going to happen. For a patient to be turned from one side to the other, her position being changed when she becomes wearied, is of very great advantage in guarding against retroversion, descent, and prolapse of the uterus.

4. It has a decidedly beneficial effect upon the mental state, for the patient is of the opinion, whether the profession is or not, that her maidenly contour will thus be restored. Thus her mind is placed at ease, and this is no small factor in the establishment of an uneventful convalescence.

The objections to the binder are few:

1. Does it stimulate "after pains?" All I can say is that I have seen just as many cases of "after pains" where the binder was not applied as where it was, and in some cases where I have removed the binder the pains continued. I do not remove it now

in cases of "after pains." These pains can easily be controlled by a more sparing use of ergot and a little more judicious use of morphine.

2. Does it cause retroversion, descent, or prolapsus of the uterus? When not properly applied, I am of the opinion that it does; but when applied as I have outlined, thus allowing the patient to be turned and *not* allowing her to remain upon her back, it possesses advantages far above the objection raised, and even is a great factor in preventing the mentioned sequela.

3. Does it actually help to restore the maidenly contour? In answer to this question, all I can say is that the patient is of the opinion that it does, and surely no professional man can say that it does not. All in all, it seems to me that the obstetrical binder is a rational, feasible, and simple device, when in the hands of a judicious obstetrician a decided help, comfort, and blessing to womankind.

Dr. Henry B. Hemenway. of Evanston; Ill., writes:

For the first decade of my obstetric practice I used a binder in all cases. Then, having moved into a community in which professional opinion seemed opposed to such treatment, I permitted each patient to follow her own inclinations in that regard. During the last decade I have adhered to the routine use of the bandage.

Statistics are frequently misleading, especially where there are many elements to be considered, and a relatively small number of cases. The general conclusions of a close observer are often more reliable than figures. It is my experience that patients are more comfortable with the binder, and that they are less liable to have post partum hemorrhage, and other complications.

During the later months of pregnancy the intra-abdominal tension is great. When the womb is suddenly emptied there is a strong tendency toward congestion in the abdominal viscera. The blood vessels are enlarged and relaxed, and pressure upon them is removed. The engorgement thus resulting favors hemorrhage and relaxation of the womb, and thus makes a quiet nest for the development of bacteria. If the uterus is contracted and relatively bloodless, the outflow of lochia may more perfectly wash out any possible germs. A broad bandage, applied as soon as the placenta is expelled and drawn as tight as it can be conveniently, to some degree replaces the tension present before confinement. It is well known that the hand applied to the fundus uteri tends to produce contraction of that organ, and it seems that the binder has a similar effect.

If the foregoing reasoning covers the rational use of the bandage, it follows that the bandage should be applied as soon as possible, and it should firmly compress the abdomen. I can see no sense in the practice of a midwife who told me that she always

put on a bandage the *second* day. The first twenty-four hours is the most efficient time for the binder.

A binder around the pelvis makes little pressure upon the abdomen. Though that is the only portion covering the womb, I regard the portion above the ilia as the more important, for this portion gives direct pressure on the abdomen. I therefore prefer a bandage extending from pubes to the ribs.

A roller towel makas a good bandage. Sheeting is harder to pin. When the bandage is specially prepared I find that tapes sewed on to each side facilitate the ease and perfection of the application. Any portion may then be tightened or loosened without disturbing the rest. In a similar manner, using strong thread and a long running stitch, the band may be perfectly and quickly applied.

The value of the binder "to preserve the form" is exceedingly doubtful.

Dr. Theresa Bannan, of Syracuse, N.Y., writes:

The obstetrical binder, though not a necessity, is a most comfortable and valuable adjunct of the obstetrical toilet. Labor, by diminishing the abdominal contents, leaves the muscular walls too loose to fulfil their function. The patient has a sensation of emptiness and a consciousness of tumbling intestines. For comfort she demands a binder to hold the abdominal walls and contents snugly together until the muscles have regained their tone. The nerve supply is thus stimulated, favoring involution and peristalsis. Moreover, the patient believes that a binder is necessary to regain the original beauty of her form. This it does probably by calling attention to the need of abdominal exercise and correct poise, training the muscles to meet the abdominal contents rather than allowing the contents to distend the lax muscles. The binder should encircle the patient from the pubes to the waist. Its disadvantages are not apparent.—*N. Y. Med. Jour. and Phila. Med. Journal.*

Acute Anterior Urethritis of Gonorrheal Origin.

The following outline of treatment to be followed in cases of acute anterior urethritis of gonorrheal origin is recommended by E. G. Ballenger in *Southern Medicine and Surgery*:

For the successful outcome of the treatment a well-regulated method of living is of the greatest importance. The patient should avoid all sexual excitement, alcohol, coffee, highly seasoned food, condiments, gravies, excessive use of tobacco and any violent exercise. The diet should consist of milk, buttermilk and other light, easily digestible substances that do not overload the urine. Large quantities of plain or lithia water, or lemonade, are of value, and the bowels should be regulated by mild laxatives or aperient mineral waters.

It should be kept in mind that the great feature of gonococci is to linger and to recur.

Internal medication is of great value. The author recommends balsam of copaiba and oil of sandalwood as of great benefit when given in doses of five minims (.30) each, three or four times daily, if no stomach disturbances arise.

In using urethral injections of the silver preparations the patient should be instructed to pass urine before the injection. The sides of the meatus are so pressed as to retain the fluid after the syringe has been removed. The fluid should be retained for five or ten minutes after each injection. The injections should be repeated once in three hours during the first three days, and gradually reduced to three a day and continued until the quantity of pus is very small. A saturated watery solution of hydrastin muriate should then be substituted for the silver and continued for from ten days to two weeks. If shreds and discharge are still present at the end of two or three weeks a more astringent preparation may be given, but always avoiding one that burns.

For this stage of the disease the author recommends the following combination:

℞ Acidi carbol ..... gtt. vi
Cupri sulph ..... gr. x-xv
Plumbi acetatis ..... gr. x
Aquæ dest q. s. ad ..... ℥viii
M. Sig.: To be used as an injection.

If a burning sensation appears the injection should be diluted. The meatus should be anointed with vaselin during the acute stage to prevent its being glued together or to stick to the protecting cotton and thus create a damming back of the discharge in the urethra. The patient should be urged to attend to proper hygiene, diet and medication until the shreds disappear from the urine.—*Journal A. M. A.*

Tabes Dorsalis. The general and symptomatic treatment of tabes dorsalis, according to *Med. News*, consists in: 1. Avoid carefully all physical and mental exertion as well as alcoholic and sexual excess. 2. Every day on arising administer friction along the vertebral column by means of a horsehair glove.

The following should be taken every other day before meals:

℞ Pulv. capsici ..... gr. ii
Pulv. ergotæ ..... gr. v
Pulv. glycyrrhizæ ..... gr. x
Mellis q. s.
M. Ft. pil. No. xxx. Sig.: One pill before each meal and repeat every second day.

During the alternate days the following is recommended :

℞ Potass. iodidi ..... gr. xx
Aquæ ..... ℥iv
M. Sig.: One to two teaspoonfuls after each meal, in a glass of milk.

If the cause of the trouble is specific, mercurial inunctions are indicated.

If the pains are very severe the following combination is recommended :

℞ Morph. hydrochlor ..... gr. x
Cocainæ hydrochlor ..... gr. v
Aquæ dest ..... ℥i
M. Sig.: Fifteen drops to be injected hypodermically to relieve the pains.

To counteract the urinary and ocular affections one or two pills a day of the following combination is recommended :

℞ Ext. belladonnæ ..... gr. iii
Ext. gentianæ ..... gr. v
Pulv. glycerhizæ ..... gr. x
Mellis q. s.
M. Ft. pil. No. xx. Sig.: One or two pills daily.

The bowels must be kept active with glycerin enemata, or one of the following pills may be substituted :

℞ Podophyllin ..... gr. ii
Ext. cascaræ sagradæ ..... gr. x
Mellis q. s.
M. Ft. pil. No. x. Sig.: One pill at bedtime for bowels.—*Journal A. M. A.*

Saline Injections and Rectal Feeding in Gastric Ulcer.

The treatment of acute gastric ulcer, according to F. D. Boyd in an abstract in *Med. Review of Reviews*, is rest for the stomach. An adult resting requires on an average 2,000 calories per diem to maintain the proper balance of nutrition, and it has been found that rectal absorption ranges from 300 to 500 calories daily. Rectal alimentation, therefore, means partial starvation and, in addition, it causes an increase in intestinal putrefaction. It is the common belief that substances injected into the large intestine reach only to the ileocecal valve, but, according to this author, particles under favorable conditions may reach the stomach. In this connection he quotes the experiments of Gützner, that if starch emulsion be injected into the rectum with a normal saline solution, the starch can be washed out of the stomach in from four to six hours afterward. This occurs partly through recurrent peristalsis or, more probably, by the action of the surface epithelium of the intestine. It is probable, therefore, according to this author,

that rectal feeding may interfere with gastric rest, as considerable pain and vomiting frequently follow nutrient enemata. He recommends, therefore, in the beginning a mild aperient. No food should be given by the mouth during the period of physiologic rest of the stomach. Every six hours one pint of warm normal saline solution is syphoned into the bowel by means of a soft catheter and a filter funnel. This relieves thirst. If irritability be present, a small amount of morphine may be introduced into the rectum.

No fluid should be taken by the mouth. Water is not absorbed by the stomach to any great extent, and must be passed into the intestine, and thus sets up peristalsis, consequently it must not be given, especially if gastric hemorrhage be present. The mouth and teeth must be properly cared for, as salivation and irritating secretions from the mouth are swallowed and gastric irritation is set up. In simple ulcer complete rest for from twenty-four to forty-eight hours will cause all pain and gastric hyperesthesia to pass away. If these symptoms continue under this treatment for three days it means that the healing process is not going on and that adhesions are probably present. The period of complete rest should continue for from four to six days, and after this milk in small quantities may be given. It is unnecessary to peptonize the milk, but it should be diluted with water, with the addition to a small amount of sodium bicarbonate or phosphate.

At the end of the second week the patient may take sufficient milk to maintain the nutritive balance and the diet may be gradually increased till at the end of four weeks the patient may be placed on a convalescent diet without discomfort.

The treatment of gastric hemorrhage is the same as that of acute ulcer. Severe or repeated hemorrhages may require more active treatment. Of the medicinal preparations recommended to check hemorrhage, Boyd recommends morphine hypodermically and adrenalin by the mouth. He recommends lavage in cases of hemorrhage, against the usual opinions, stating that its benefit more than counterbalances its dangers. The presence of coagulated blood in the stomach causes vomiting and increased peristalsis which is more likely to disturb clot formation than lavage when carefully carried out. He, therefore, recommends lavage, using water at a temperature of from 104 to 105 F. Iced water is not recommended, as it tends to induce shock.

F. P. Henry, in *Amer. Med.*, recommends rest, both general and local, in the treatment of gastric ulcer. He states that this may be carried out by putting the patient to bed and nourishing him by rectal enemata. He recommends Ewald's mixture for rectal feeding: two or three eggs beaten up with a tablespoonful of cold water. A small quantity of starch is then boiled with half a cupful of a 20 per cent. solution of grape sugar to which is added

a wineglassful of red Rhine wine; the egg mixture is then slowly added, taking care that the fluid is not hot enough to coagulate the eggs. Eight ounces is sufficient at one feeding, preceded by a simple saline enema. These nutrient enemata should be continued for three days, followed by small amounts of food, consisting of milk or gruel, by the mouth. When milk disagrees with the patient, buttermilk or boiled or peptonized milk is recommended, gradually increasing the diet to raw or soft boiled eggs, beef, mutton and chicken broths.

The medical treatment, according to this author, is of secondary importance. Bismuth subnitrate is recommended in half-dram doses three times daily, suspended in barley water or mucilage. Severe pain demands morphine. Vomiting may be checked by morphine or cocain. Hematemesis may be checked by hypodermic injection of ergot or adrenalin. Gallic acid and lead acetate are also of value. Some form of anemia frequently accompanies gastric ulcer. The blood should be improved by some bland form of iron after the acute symptoms have subsided. For this purpose Ewald recommends a 2 to 3 per cent. solution of the sesquichlorid of iron, taking one teaspoonful thrice daily in a wineglassful of egg water, making a solution of albumin by adding one part of egg albumin to two parts of water.

Some authorities recommend a combination similar to the following in cases of gastric hemorrhage:

℞ Acidi tannici ..... gr. xxx
Glycerini ..... ℥ xxx
Aquæ dest. q. s. ad ..... ℥i
M. Sig.: To be taken at one dose. Or:

℞ Bismuthi carb ..... gr. xii
Pulv. tragacanthæ ..... gr. v
Acidi hydrocyanici dil ..... ℥v
Liq. morph. hydrochlor (1 per cent.) ..... ℥x
Aquæ chloroformi q. s. ad ..... ℥ss
M. Sig.: At one dose and repeat three times a day.

Hyperchlorhydria not infrequently precedes ulcer formation. To counteract this condition bismuth subnitrate is recommended in large doses after meals, put up in wafers or suspended in mucilage.

The following combination is of value:

℞ Sodii bicarb ..... gr. viii-xv
Magnesiæ calc ..... gr. x
Bismuthi subnit ..... gr. xx
Cretæ preparatæ ..... gr. iv
M. Ft. chart. No. i. Sig.: One such powder after each meal.

Constipation may occur with the administration of the foregoing, and under such circumstances a saline laxative is indicated. —*Journal A. M. A.*

Physician's Library.

The Surgical Assistant. A Manual for Students, Practitioners, Hospital Internes and Nurses. By WALTER M. BRICKER, B.S., M.D., New York City. With 123 original illustrations. Price $2.00. Published by The International Journal of Surgery Co., Medical Publishers, 100 William Street, New York.

A skilled assistant is of great benefit to all surgeons, but too often their assistants are general practitioners, untrained as regards technique. The object of this book is to make the surgeon's assistant an adept in his department, and as it deals with a subject not touched upon in works on surgery, it will prove of practical value to all, as it embraces many little " wrinkles " well-known to the surgeon, but before not set forth in print.

American Edition of Nothnagel's Practice—Diseases of the Kidney, Diseases of the Spleen, and Hemorrhagic Diseases. By DRS. H. SENATOR and M. LITTEN, of Berlin. Edited, with additions, by JAMES B. HERRICK, M.D., Professor of Medicine in Rush Medical College, Chicago. Octavo of 816 pages, illustrated. Philadelphia and London: W. B. Saunders & Company. 1905. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. Cloth, $5.00 net; half morocco, $6.00 net.

With the appearance of this, the eleventh volume of Saunders' American edition of Nothnagel's Practice, the work nears completion, the final volume on the Heart being now in active preparation. Like the others, this volume can be taken as the acme of knowledge on the subjects embraced. Professor Senator"s clear style, systematic arrangement of facts, and logical reasoning make his articles on the kidney indispensible to the practitioner. The editor, Dr. Herrick, has enlarged on certain points whenever necessary, especially regarding treatment, diagnosis, urinary analysis, etc., so as to increase the value of the work to the general practitioner. He has also added articles on cryoscopy and phloridzin glycosuria.

The sections on the spleen and the Hemorrhagic diseases were written by Professor Litten, whose pioneer work in these fields is widely known. The articles on the mosquito and its

relation to malaria, on splenic anemia, on congenital icterus with splenomegaly, and on the X-rays in the treatment of leukemia, have been brought down to date by the editor. Indeed, the editor's interpolations add greatly to the practical value of the volume, and we are sure such an authoritative work on these subjects has never before been published.

The Treatment of Fractures; with Notes on a Few Common Dislocations. By CHARLES L. SCUDDER, M.D., Surgeon to the Massachusetts General Hospital. Fifth edition, revised and enlarged. Octavo of 563 pages, with 739 original illustrations. Philadelphia and London: W. B. Saunders & Company. 1905. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. Polished buckram, $5.00 net; half morocco, $6.00 net.

Every year for the past five years it has been our pleasure and profit to review a new edition of this excellent work by Dr. Scudder. It is, indeed, a most remarkable book, and the author and publishers are to be congratulated upon its publication. In this, the fifth edition, Dr. Scudder has added some fifty new illustrations, many of them X-ray plates, illustrating the actual line of fracture. The text also has been very carefully revised, and new matter added throughout. Important changes have been made in the treatment of fractures of the neck of the femur, bringing this part of the book in accord with the latest advances. The 739 illustrations do what they should—they illustrate, showing the reader just what is intended. Undoubtedly this feature has aided greatly in the success of Dr. Scudder's work.

International Clinics. Volume II. Fifteenth Series. 1905. Philadelphia and London: J. B. Lippincott Company.

This volume is well illustrated, has a fine list of contributors and treats in an exceptionally able manner on subjects in medicine, surgery, gynecology, ophthalmology, rhinology, physiology, and pathology. There is also a splendid chapter on treatment. As is now generally well-known, "International Clinics" is issued quarterly, is a standard publication, has thousands of readers, and is one of the most up-to-date publications issued. One would think every progressive practitioner would be possessed of it.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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Dominion Medical Monthly

And Ontario Medical Journal

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VOL. XXV. TORONTO, SEPTEMBER, 1905. No. 3.

COMMENT FROM MONTH TO MONTH.

The recent meeting of the Canadian Medical Association at Halifax was one of the best in the history of the organization. The total attendance was 222, but from the standpoint of actual attendance from our own profession in the Dominion, it appears to have been the third largest meeting since 1867. The papers were excellent; the discussions often animated, often extended, always interesting, always profitable. Looking back at the meeting and remembering particularly the social side, it would appear that the Halifax men had quietly laid themselves out to eclipse any and every thing along this line heretofore attempted; and in the judgment of the guests they succeeded. Most every one thought he was going to a slow town, but the rapidity of the week fairly swept one off his feet. The open-handed, free hospitality of the West was only equalled by the unbounded desire of the East to out-do last year's welcome. The profession of Toronto will find it a difficult matter in 1906 to get into the hot pace which has been set.

On all sides it was quite apparent that the idea of reorganization was paramount, and that it was time that a start be made towards putting the Association upon a properly organized basis. Towards this end a Special Committee was appointed, consisting of a member from each province, with Dr. McPhedran as chairman. This committee made an interim report, and will continue to act, and will make requests for suggestions as to the best methods to adopt, and will no doubt have much valuable material for a report for the next annual meeting. Some of the suggestions already made are: incorporation, the publishing of a journal, additional sections, an increased membership fee, permanent membership. A start has been made, and it is to be hoped that the entire profession will take a deep interest in the matter and co-operate heartily with the committee in attaining the desired end.

The question of a Department of Public Health for the Dominion remains as it was last year. Nothing has been secured other than the ratification by the Minister of Agriculture that he agrees with the spirit of the movement. The Special Committee on this matter, which was appointed after the Montreal meeting, and consisted of Dr. R. W. Powell, Ottawa (convener), Dr. E. P. Lachapelle, and Dr. T. G. Roddick, Montreal, on their own request were discharged, and a new and larger, with power to add to their number, appointed, with Dr. E. P. Lachapelle, of Montreal, as convener. It is an important question, and it is to be hoped that the new committee will be able to more successfully prosecute the campaign.

According to the reports of the Registrar-General for Ontario, there seems to have been more than the usual amount of whooping-cough throughout the province during the month of August. Whooping-cough is one of those diseases of supposed bacterial origin, but of which as yet there is no

absolute proof of the specific bacterium. Time and again different observers have described various bacteria, but no advance has been made towards establishing the exact cause of the disease; and its prevention is not established on the same precise lines as scarlet fever and other diseases of childhood. Being, however, a dangerous and at times a desperate malady, as evidenced in the August returns, it might be given better attention at the hands of the health officials, as although the law requires the reporting of all contagious and infectious diseases, it is generally made to read, scarlet fever, diphtheria and smallpox. It is often, too, a desperate illness to treat, there being no drug which can be recommended to in all cases reach the spot. Until such times as research shall establish a specific bacterium as the cause of whooping-cough, the treatment by antitoxic serum, which has been tried, remains empirical.

The medical profession all over Ontario will receive with profound regret the announcement that Dr. Daniel Clark has retired from the active superintendency of the Toronto Provincial Hospital, and they will receive with equally strong regret the news that the Whitney Government will perpetuate that vicious policy of former governments in the Province of Ontario, namely, the appointing of superintendents and assistant physicians to these institutions from the party caucus. It was expected that there would be a radical change in this direction, and that no longer would medicine in this province be disgraced by such improper appointments. We are not saying one word about the professional qualifications of the gentleman who has succeeded to the position rendered vacant by the retirement of Dr. Clark. We only wish to reiterate once more our condemnation of the practice which passes over men trained in this special hospital service, for the man who knows absolutely nothing of the treatment of the insane as carried out in well-governed institutions. It seems to us, further, that if appointments of this character are to continue to obtain, men who have gained

distinction in their profession, other than as politicians, should be given a chance. How these unfortunate people must smile when they learn that their doctors are chosen for their political activity in behalf of the powers that be. The stump and the caucus are the great schools of training for the alienist in Ontario.

The immediately foregoing paragraph was written after having read the now apparently false announcement in *The Globe* that a defeated candidate in a western constituency was to be appointed to succeed Dr. Clark. We are glad to learn that this is not the truth, but that a hospital administrator of the ability and capacity of Dr. C. K. Clarke has been chosen and promoted. This is on line with our views, but the new departure was short-lived, as apparently others have been appointed to the asylum service, not alone of their especially good professional attainments. All the press, in making announcements of these appointments, take good care to mention the political affiliations of the appointees. These appointments are purely political, and as such should be condemned by the medical associations.

News Items.

CANADIAN.

Dr. Wiley, of Dresden, contemplates going into practice in Brantford shortly.

Dr. N. F. Ferguson, of Alliston, medical doctor for the C.P.R., has left for Byng Inlet.

Dr. Boyd, has left for New Liskeard, having an appointment as assistant to one of the physicians there.

Dr. W. G. Reive, late resident physician at Huntsville Hospital, has bought the property of Dr. Philp, of Arthur, Ont.

Dr. Vaughan Morris has left Warwick for Minneapolis on a visit and purposes hanging out his shingle in North Dakota.

Dr. Will Procunier, a former student of the Aylmer C. I., has been appointed house surgeon at St. Michael's Hospital, Toronto.

Dr. James Webb is about to locate in Niagara Falls, Ont. He has practised for several years in the Canadian Soo, and at Copper Cliff. At the latter point he was head physician of the Canadian Copper Co. Hospital.

Dr. J. A. Rollins, of Exeter, has sold his practice there to Dr. A. F. Malloy, for some time house surgeon at the Western Hospital, Toronto. Dr. Rollins has practised in Exeter for about twenty years, and intends to retire from the active duties of his profession for a time.

Harry Watson, M.D., Winnipeg, Man., has been appointed acting assistant surgeon, Public Health and Marine Hospital Service for the U. S. Government, and will have full charge of medical examination of all aliens passing through Winnipeg *en route* to the United States.

Dr. M. A. V. Armstrong has sold his residence, drug store and practice at Fordwich to Dr. Foster, of Providence Bay, Manitoulin Island. Dr. Armstrong has been practising in Fordwich for nearly three years. He is undecided as to what he will do, but has some intention of going to the West.

Canadian Medical Association—General Secretary's Report.—Two hundred and sixty-seven names were inscribed on the treasurer's register at the thirty-seventh annual meeting of the Canadian Medical Association, held in Vancouver, B.C., from the 22nd to the 25th of August, 1904. It was the third largest meeting in the history of the association. Of this number sixty-one were guests, several distinguished members of the profession being present from Great Britain and the United States. Two hundred and six were from the Dominion of Canada; and the fact bears some significance, that our guests at that meeting numbered nearly one-third of the attendance from our own profession in Canada. In detail the attendance may be grouped as follows: Vancouver, 40; Victoria and the province, 40; Ontario, 56; Quebec, 21; N.W.T., 19; Manitoba, 18; New Brunswick, 3; Nova Scotia, 6; P.E.I., 3; England, 3; Scotland, 1; United States, 55; R.M.S. *Athenian,* 1; *Empress of China* S.S., 1. One hundred and one new members were added to our lists, that number having been elected to membership; and there were present forty-three members of the profession from Canada who did not seek membership in our association, which number was about one-half of the previous year. Amongst this number were some who took a prominent part in the proceedings of the meeting, such as delivering addresses of welcome, acting on the Nominating Committee, etc. This seems rather anomalous, and I respectfully call your attention to it. I call your attention to a notice of motion handed in by Dr. H. B. Small, Ottawa, at the last meeting: "That the members from each province, present at an annual meeting, elect from themselves three representative members, who, together with the President, Secretary and Treasurer, shall constitute the Executive Council of the Association." This is a radical

step towards amending the Constitution, appears like the thin edge of the wedge towards reorganization, and is deserving of your most careful and serious consideration. Although no official acceptance of the invitation sent by this Association to the British Medical Association, to convene in Canada in 1906, has been received, it is understood that that Association has accepted this invitation, and the additional invitation forwarded by the profession of Toronto, to meet in the Queen City of Canada. The meeting of this well-organized body in Canada will, I trust, excite some interest in the reorganization of Canada's national, medical organization. It is with sorrow that I report the death of one of our past-Presidents, Dr. James Thorburn, Toronto, since our last meeting. Dr. Thorburn filled the office of President in 1895-1896.

Canadian Medical Association—Report of Special Committee on Public Health.—As convener of your sub-committee in *re* the creation of a Department of Public Health as a Dominion measure, I have the honor to report that practically no advance has been made since we first presented your views to the Federal Government on this important question three years ago. Strong resolutions have been passed by your Association containing the views of the profession on this matter, year after year, and they have been duly forwarded to the proper authorities at Ottawa, to say nothing of the personal representations of your sub-committee, conveyed to the Government by way of deputation and personal interview. On the last occasion on which I waited upon the Hon. the Minister of Agriculture, he pointed out to me that he was familiar with the views of our Association as contained in the several resolutions referred to above, and that it appeared to him to be unnecessary to call the committee to Ottawa to reiterate what we had so clearly laid before him. He assured me that the whole question had his entire sympathy and that he trusted to see such a scheme as had been outlined to him brought into operation. And he further said that it was his intention to bring the matter again to the attention of the Prime Minister,

he hoped at a date sufficiently early to enable him to give something rather definite for our meeting at Halifax. Your committee feel that they have done what they could to induce the Government at Ottawa to create a Department of Public Health, under one of the existing ministers, in order to place this important branch of the public service on the same footing as it stands in nearly all progressive countries. We regret, however, to be obliged to report that so far our efforts have been unavailing, and as we believe that a more powerful and influential committee is needed from this Association to more seriously impress the Government with the great importance of this question, we respectfully ask to be discharged. (Sgd.) R. W. Powell, *Convener.*

Canadian Medical Association—Resolution *re* Public Health.—*Resolved,*—That a committee be appointed from this Association to wait upon the Dominion Government and lay before them the several resolutions now on the books of this Association in reference to the creation of a Department of Public Health, in order that all matters pertaining to the public health, over which the Dominion Government has jurisdiction, may be administered under one official head. That the committee be requested to impress upon the Government the great importance and public utility of this matter, and that it is the wish of the medical profession in the Dominion, as represented by the Canadian Medical Association, that such an advance should be made in this branch of the public service. That the committee consist of: Dr. E. P. Lachapelle (convener), Montreal; Dr. R. W. Powell, Ottawa; Dr. Daniel, M.P., St. John; Lt.-Col. Carleton Jones, Halifax; Dr. H. A. Bruce, Toronto; Dr. H. H. Chown, Winnipeg; with power to add to their number.—Carried.

Canadian Medical Association—Report of Nominating Committee.—Place of meeting in 1906: Toronto, at same time as British Medical Association meeting. President: Dr. Alexander McPhedran, Toronto. General Secretary: Dr. George

Elliott, 203 Beverley Street, Toronto. Treasurer: Dr. H. B. Small, Ottawa. Vice-Presidents: Dr. H. D. Johnson, Charlottetown, P.E.I.; Dr. G. Carleton Jones, Halifax, N.S.; Dr. Emery, St. John, N.B.; Dr. H. S. Birkett, Montreal, Que.; Dr. J. D. Courtenay, Ottawa, Ont.; Dr. S. P. Prowse, Winnipeg, Man.; Dr. H. G. McKid, Calgary, N.W.T.; Dr. R. E. McKechnie, Vancouver, B.C. Local Secretaries: Dr. Simpson, New Glasgow, P.E.I.; Dr. J. R. Corston, Halifax, N.S.; Dr. J. A. Scammell, St. John, N.B.; Dr. Ridley McKenzie, Montreal, Que.; Dr. Harold Parsons, Toronto, Ont.; Dr. J. R. Davidson, Winnipeg, Man.; Dr. J. Hislop, Edmonton, N.W.T.; Dr. W. H. Sutherland, Revelstoke, B.C. Executive Council: Dr. W. P. Caven, Toronto; Dr. A. A. Macdonald, Toronto; Dr. F. LeM. Grasett, Toronto. (Sgd.) F. N. G. Starr, Chairman Nominating Committee.

Canadian Medical Association.—The following attended the thirty-eighth annual meeting of the Canadian Medical Association, held at Halifax from the 22nd to the 25th of August: H. Beaumont Small, Ottawa; George Elliott, Toronto; F. W. Goodwin, Halifax; A. Leitch, St. Thomas; A. Stewart, Palmerston; M. D. Morrison, Old Bridgeport, C.B.; J. Fred. Lessel, Halifax; Geo. M. Campbell, Halifax; J. St. Clair McKay, Earltown, N.S.; W. H. Hattie, Halifax; M. A. B. Smith, Dartmouth; W. P. Chisholm, Brockton, Mass.; Jos. J. Doyle, Halifax; A. I. Maider, Halifax; F. A. L. Lockhart, Montreal; A. Mather Hare, Halifax; B. S. Thorne, Havelock, N.B.; C. Dickie Murray, Halifax; D. A. Campbell, Halifax; M. E. Armstrong, Bridgetown, N.S.; C. A. Webster, Yarmouth, N.S.; John J. McKenzie, Toronto; J. Ross Miller, Amherst, N.B.; R. L. Langstaff, Richmond Hill, Ont.; Duncan Campbell, W. B., Pictou Co., N.S.; R. A. Reeve, Toronto; F. R. Eccles, London; A. B. Atherton, Fredericton; F. P. Drake, London; H. L. Reddy, Montreal; W. Bruce Almon, Halifax; Charles Verge, Quebec City; J. D. Page, Quebec City; Thomas W. Walsh, Halifax; William Rockwell, River Hebert, N.S.; W. S. England, Winnipeg; W. Tobin, Halifax; Andrew Love, Sydney Mines, C.B.;

Murray MacLaren, St. John, N.B.; F. H. Wetmore, Hampton, N.B.; H. S. Birkett, Montreal; Clarence L. Starr, Montreal; H. Meek, London; F. L. Burdon, London; Howard M. Church, Montreal; N. E. Mackay, Halifax; W. H. Eagar, Halifax; T. C. Lockwood, Lockport, N.S.; Ridley McKenzie, Montreal; F. G. Finley, Montreal; Chas. C. Gurd, Montreal; J. Price, Campbellton, N.B.; J. H. MacKinnon, Brooklyn, N.Y.; F. B. Day, Westville, N.S.; H. A. March, Bridgewater, N.S.; E. N. Hogan, Halifax; E. O. Hallett, Waymouth, N.S.; Francis A. R. Gow, Halifax; R. W. Powell, Ottawa; J. D. Courtenay, Ottawa; J. V. Anglin, St. John; E. N. Payzant, Wolfville, N.S.; R. E. Mathers, Halifax; L. W. Johnston, Sydney Mines, C.B.; J. J. Roy, Sydney, C.B.; R. F. O'Brien, Elmsdale, N.S.; R. D. Rudolf Toronto; A. McPhedran, Toronto; G. J. McNally, Fredericton, N.B.; R. A. H. Mackeen, Glace Bay, C.B.; W. H. Irvine, Fredericton, N.B.; A. G. Ferguson, Dalhousie, N.B.; E. H. Kirkpatrick, Halifax; Robert King, Halifax; William D. Forrest, Halifax; F. Montizambert, Ottawa; W. J. Bradley, Ottawa; C. P. Bissett, St. Peters, C.B.; John McMillan, Pictou, N.S.; D. J. Macdonald, Sydney, N.S.; W. W. Alexander, Lachute, Quebec; B. F. Boyce, Kelowna, B.C.; J. J. Cameron, Antigonish, N.S.; G. E. Armstrong, Montreal; John E. Somers, Cambridge, Mass.; Frank R. England, Montreal; F. V. Woodbury, Halifax; A. F. Buckley, Halifax; Edward D. Farrell, Halifax; M. A. Curry, Halifax; Alex. Taylor, Goderich; D. H. Taylor, Londonderry, N.S.; R. B. Nevitt, Toronto; A. McD. Morton, Bedford, N.S.; H. M. Jacques, Canning, N.S.; Thos. Trenaman, Halifax; Wm. Warwick, Westfield, N.B.; A. T. Shillington, Ottawa; L. M. Murray, Halifax, N.S.; J. L. Chabot, Ottawa; Osborne Morris, Vernon, B.C.; A. D. Blackader, Montreal; F. LeM. Grasett, Toronto; Freeman O'Neill, Louisburg, C.B.; David Alex. Shirres, Montreal; James Ross, Halifax; D. G. J. Campbell, Halifax; C. H. Dickey, Halifax; W. G. Morrow, Montreal; A. J. Cowie, Halifax; J. W. McLean, North Sydney, C.B.; F. S. Creelman, Maitland, N.S.; J. W. T. Patton, Truro, N.S.; C. Randall Gates, North Brookfield, N.S.; J. Clyde Macdonald, Westville, N.S.; F. N. G. Starr, Toronto; F. J. A. Cochran,

Halifax; M. Chisholm, Halifax; E. E. Bissett, Port Morrice, C.B.; E. Douglas, Halifax; Francis M. Caird, Edinburgh, Scotland; W. N. Wickwire, Halifax; H. K. McDonald, Lunenburg, N.S.; A. M. Hebb, Chester, N.S.; F. S. Yorston, Truro, N.S.; Howard A. Kelly, Baltimore; H. E. Kendall, Sydney, N.S.; H. Geo. Addy, St. John; G. L. Foster, Halifax; Herbert A. Bruce, Toronto; Charles S. Morton, Port Greville, N.S.; Edward Archibald, Montreal; Joseph Hayes, Nelson, N.B.; J. S. Bentley, Truro, N.S.; Mary L. Randall, Sydney, C.B.; J. H. Bell, Halifax; W. Grant Stewart, Montreal; A. P. Reid, Middleton, N.S.; D. J. Gibb Wishart, Toronto; W. W. Goodwin, Boston, Mass.; Alex. Murray, Deer Island, N.B.; J. A. Turnbull, Clark's Harbor, N.S.; H. V. Pearman, Halifax; S. R. Jenkins, Charlottetown; H. D. Johnson, Charlottetown; W. F. Hamilton, Montreal; W. T. M. MacKinnon, Amherst, N.S.; D. MacKintosh, Pugwash, N.S.; R. D. Bentley, Wallace, N.S.; A. S. Simpson, New Glasgow, P.E.I.; P. M. Balcom, Aylesford, N.S.; J. A. Sponagle, Middleton, N.S.; L. R. Morse, Lawrencetown, N.S.; Geo. H. Cox, New Glasgow, N.S.; S. C. Primrose, Annapolis Co., N.S.; G. F. Dewar, Southport, N.S.; A. J. Murchison, Clyde River, P.E.I.; C. J. Miller, New Glasgow, N.S.; W. B. Moore, Kentville, N.S.; H. R. Munro, Stellarton, N.S.; C. J. Margeson, Hantsport, N.S.; J. B. Black, Windsor, N.S.; P. McLaren, Montague, P.E.I.; Robinson Cox, Upper Stewiacke, N.S.; J. A. Sutherland, Springhill, N.S.; W. G. Putnam, Yarmouth, N.S.; H. A. Lafleur, Montreal; James Bell, Montreal; J. Appelbe, Parry Sound, Ont.; F. F. Eaton, Truro, N.S.; J. W. Stirling, Montreal; S. A. Fulton, Truro, N.S.; H. E. McEwen, O'Leary, P.E.I.; Fred. J. White, Moncton, N.B.; Joseph Hayes, Parrsboro, N.S.; A. F. Norton, Oxford, N.S.; C. A. McQueen, Amherst, N.S.; W. S. Woodworth, Kentville, N.S.; W. M. Mather, Tweed, Ont.; L. C. McLeod, Newfoundland; Louis H. Morse, Digby, N.S.; Thos. W. R. Flinn, Halifax; A. C. Jost, Guysboro, N.S.; C. Kennedy, New Glasgow, N.S.; J. H. Mack, Halifax; H. V. Kent, Truro, N.S.; J. O. Calkin, Sackville, N.B.; Thomas Walker, St. John; J. M. Elder, Montreal; F. S. D. Ford, New Germany, N.S.; C. B. Trites, Liverpool, N.S.; A. A.

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District Medical Association.—An enthusiastic and representative meeting of the medical men of Collingwood and the surrounding towns and villages for the purpose of forming a Medical Association for this district, was held in the new wing of the Collingwood General and Marine Hospital, on Friday, August 11th. Advantage was taken of holding the meeting the same day as the formal opening of the new building. The Association was organized with the following officers elected: Hon. Pres., Dr. A. R. Stephen, Collingwood; President, Dr. G. M .Aylesworth, Collingwood; 1st Vice-Pres., Dr. F. D. Kent, Thornbury; 2nd Vice-President, Dr. J. McCullough, Alliston; Sec.-Treas., Dr. D. McKay, Collingwood; Executive Committee, Drs. Arthur and McFaul, Collingwood; Dr. Pearson, Stayner. The objects of this Association are not only mutual social benefits, but also professional. At the regular meetings medical papers will be read and discussed by members of the Association. The first regular meeting will be held in Collingwood on October 5th.

Dominion Medical Monthly

And Ontario Medical Journal.

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Original Articles.

ADDRESS IN SURGERY—CANADIAN MEDICAL ASSOCIATION

EIGHTEEN CONSECUTIVE CASES OF OPERATION FOR PERFORATED GASTRIC ULCER.*

By F. M. Caird, F.R.C.S. (Edin.),
Surgeon Royal Infirmary, Edinburgh.

Addressing, as I have the honor to do, a body of brother practitioners, I have sought to find a subject of general interest to all. I, therefore, direct your attention to personal experiences of a consecutive series of eighteen cases of perforated gastric ulcer, and in doing so crave pardon for inflicting upon you so much that is well known and commonplace.

We are ignorant of the direct cause of gastric ulcer. The ulcer may pursue a symptomless course, and there may be perfect health until the disastrous rupture into the peritoneal cavity takes place, and even then the diagnosis may be obscure. As a rule, however, there are very definite indications which lead us to a correct conclusion. A history of indigestion can nearly always be obtained, either of recent date and comparatively mild, or prolonged and intermittent. The dyspepsia is associated with pain after food and with vomiting, which often

*Read before the Canadian Medical Association, Halifax, August, 1905.

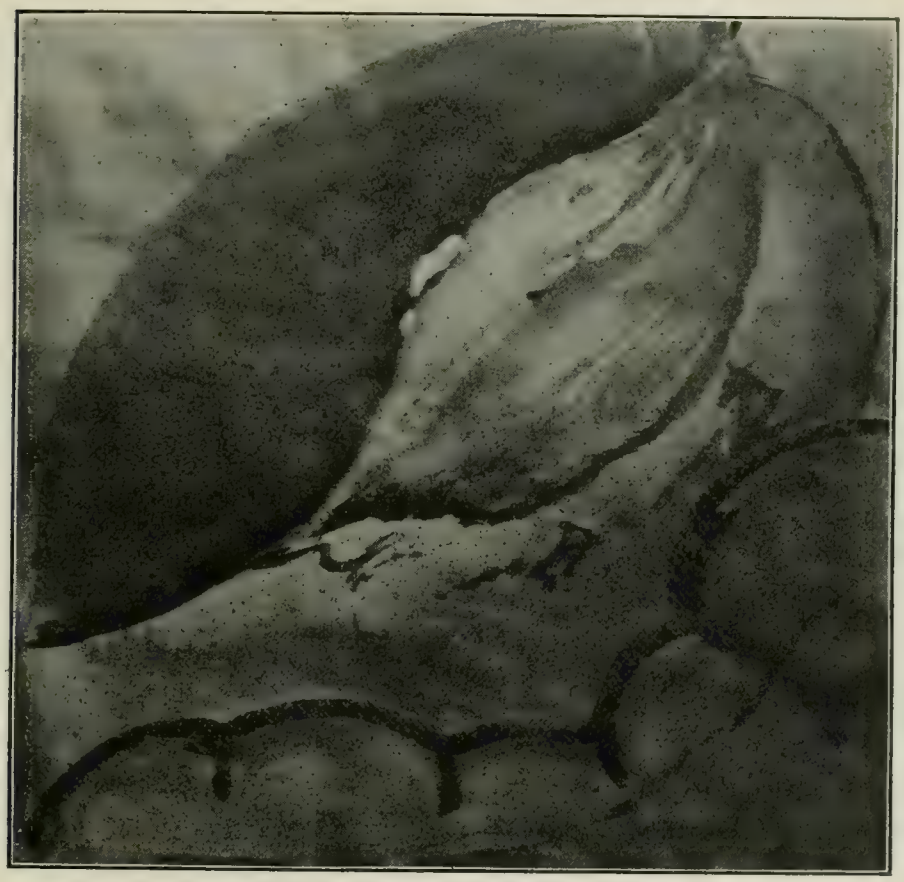
gives relief. The more classic evidences of gastric ulcer, hematemesis and melena, are usually lacking. Perforation may occur at any time, and under any circumstance, and is favored by muscular strain. Sudden intense pain, referred to the umbilical region, gives warning of the perforation. The patient becomes faint and collapsed, has to lie down, and generally vomits. As a rule the passage of flatus ceases, and symptoms

Diagram of stomach to show sites of perforation: A., Cardiac Portion; B., Fundus; C., Middle; D., Pyloric Portion; E., Pylorus. The figures refer to the cases 2, 7, 15, 16 on the posterior aspect of the stomach.

simulating those of obstruction may arise. Occasionally there is a movement of the bowels.

The initial condition of shock varies in degree and prolongation. Generalized abdominal pain is felt; the abdomen becomes board-like and rigid, no longer participating in the respiratory wave. The most useful indication of danger is

found in the shabby, rapidly quickening, pulse. Respiration increases and the temperature has a tendency to rise. On palpitation the abdominal wall is hyperesthetic, and marked local tenderness is evinced in the epigastric region and above the pubis. There may be diminished liver dullness. Rectal examination sometimes reveals tenderness, but there is rarely bulging in the Pouch of Douglas. There is not any difficulty or pain experienced during micturition. Careful notes should be taken when the patient is first seen. On re-examination it may be



CASE 14a.—Mass of lymph, uniting liver and stomach; perforation hidden.

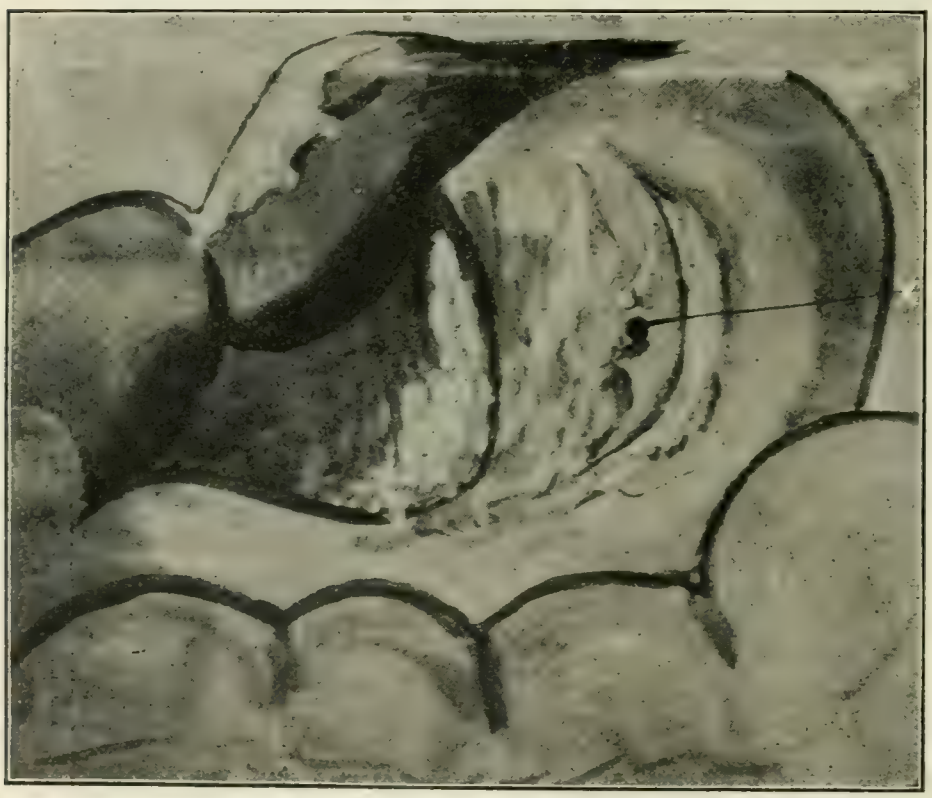
found that the liver dullness has entirely disappeared. More especially is this noticed after the patient has been lifted or moved. The general symptoms tend to become rapidly aggravated and merge into those of general peritonitis.

Perforation of gastric ulcer, acute appendicitis, acute pancreatitis, and the rupture of carcinomatous ulcers of the intestine may mimic each other. Influenzal gastric pains, and the gastric colic associated with adhesions have occasionally led the surgeon

astray. A small exploratory incision may be required to clear up a diagnosis in doubtful cases.

The salient features which determine operation are the sudden onset of painful symptoms, the previous history of gastric ailment, the localized epigastric and supra pubic tenderness, along with the abdominal rigidity and changes in the extent of the liver dullness. To this we may add the progressive frequency of the pulse rate.

Perforations leading to acute symptoms occur mainly on the anterior aspect of the stomach where there is less chance of



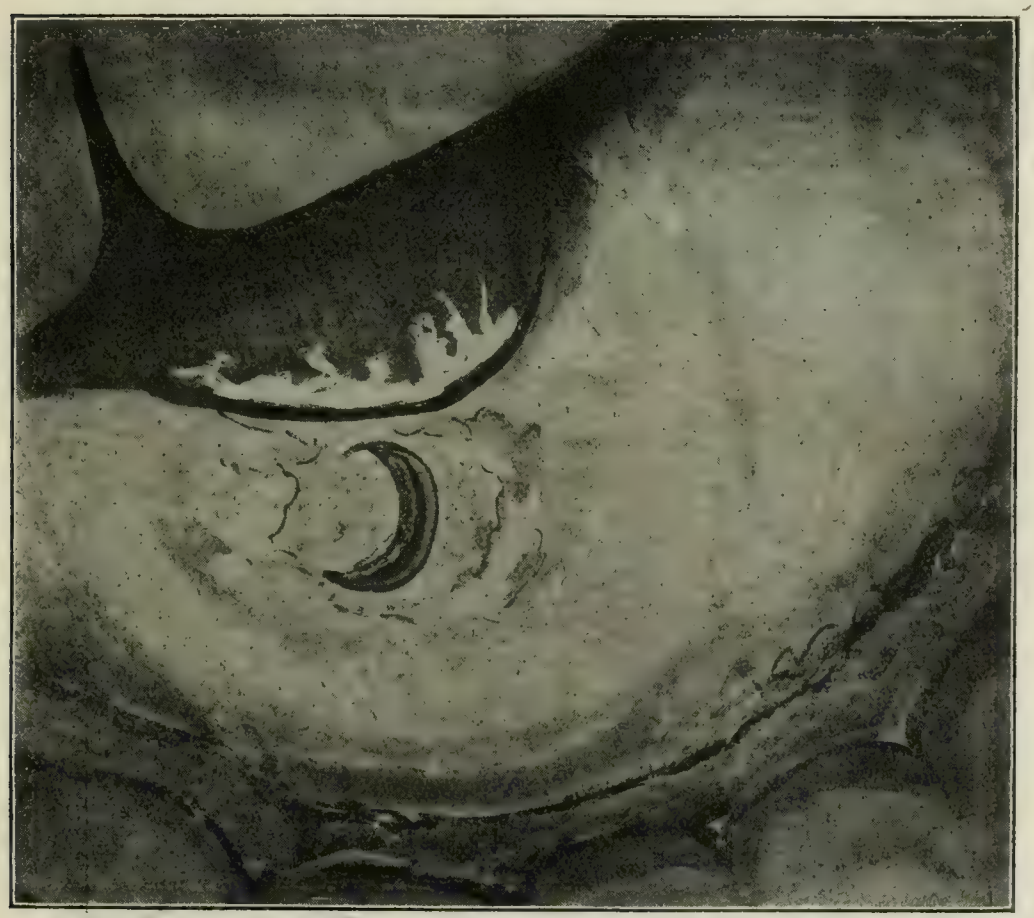
CASE 14b.—Liver and lymph raised, exposing the perforation "X."

adhesion to neighboring structures. They are most frequent towards the lesser curvature and the pylorous. There may be more than one perforation. The ulcer varies in type from the characteristic small sharply cut terraced form, with comparatively healthy surroundings, to the large ragged rent in the midst of a chronic indurated perigastritis with edematous serosa.

It would appear that as the acrid acid stomach contents escape into the peritoneal cavity that the whole serous membrane reacts, and a rapid effusion of an alkaline nature takes place

which neutralizes the acid secretion. The greater portion of the fluid found at operations is due to this source. Blue litmus paper acquires a deeper tint by contact with it, and is not reddened till close to or at the margin of the perforation.

The fluid abounds in greatest quantity in the vicinity of the rupture under the diaphragm. It accumulates markedly in the pouch of Douglas, and is there associated with the characteristic supra pubic and rectal tenderness. In posterior perforations it



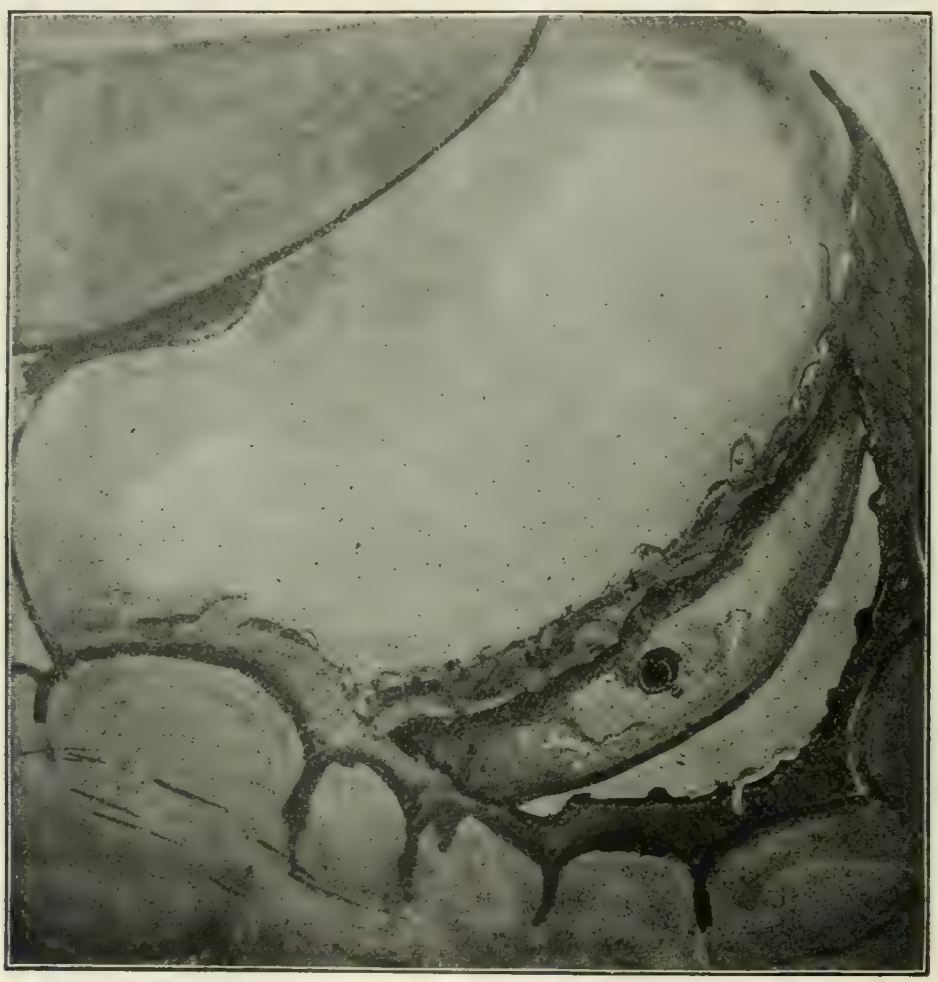
Case 3.—Large anterior perforation, pyloric portion of stomach.

may be encysted in the lesser omental sac. The more dependent portion of the collections become rapidly purulent.

In peforated gastric ulcer we are already confronted with septic infection. We cannot therefore avail ourselves of the measures introduced by Mikulicz, the injection of nucleinic acid to create a prophylactic leucocytosis. As yet the method recently applied by the genius of Bier, in treating successfully acute and septic inflammation by means of local congestion is not available.

Our treatment at present consists in performing laparotomy, which enables us to prevent the further escape of gastric content. It allows us not only to get rid of what has already escaped, but in addition to cleanse the peitoneum by careful washing out. It enables us to close the rent and to establish free drainage.

To do all this a general anesthetic is required. When once the nature of the case is established it is wise to get free access

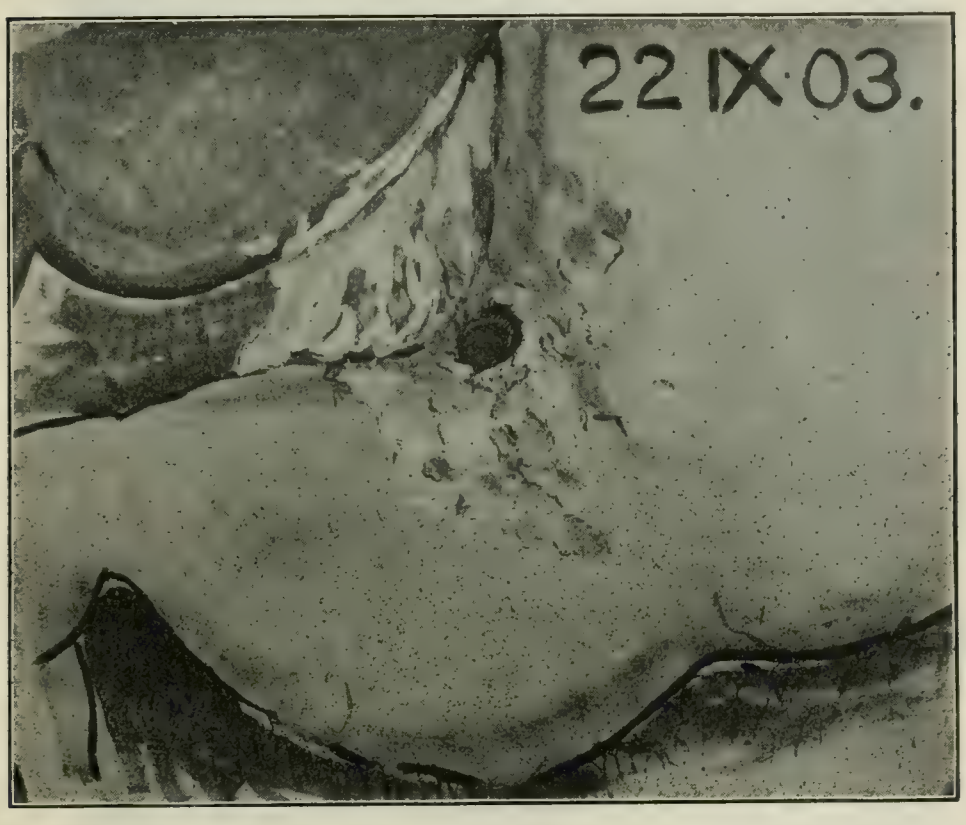


Case 7.—P.sterior perforation exposed by opening lesser sac.

by an extensive incision. We are guided in our search for the aperture by the lymph in its vicinity, by the nature of the escaping fluid, and the direction from which it wells. On identification the ulcer may be plugged with iodoform gauze, and we at once thoroughly wash out the abdominal cavity with sterilized salt solution. A counter opening should be made above the pubis and the glass nozzle of a douche introduced while the ulcer is

being closed. Excision of the ulcer is not to be recommended. It means loss of time and loss of blood without corresponding gain.

Where there is much perigastritis with unyielding or a friable tissue, a series of interrupted Lembert sutures (silk) may be introduced at some little distance from the margin of the ulcer and tightened up en masse. Over these a second series may be required. Occasionally a preliminary stitch or two may be used to transfix the whole thickness of the ulcer, and so diminish its size.

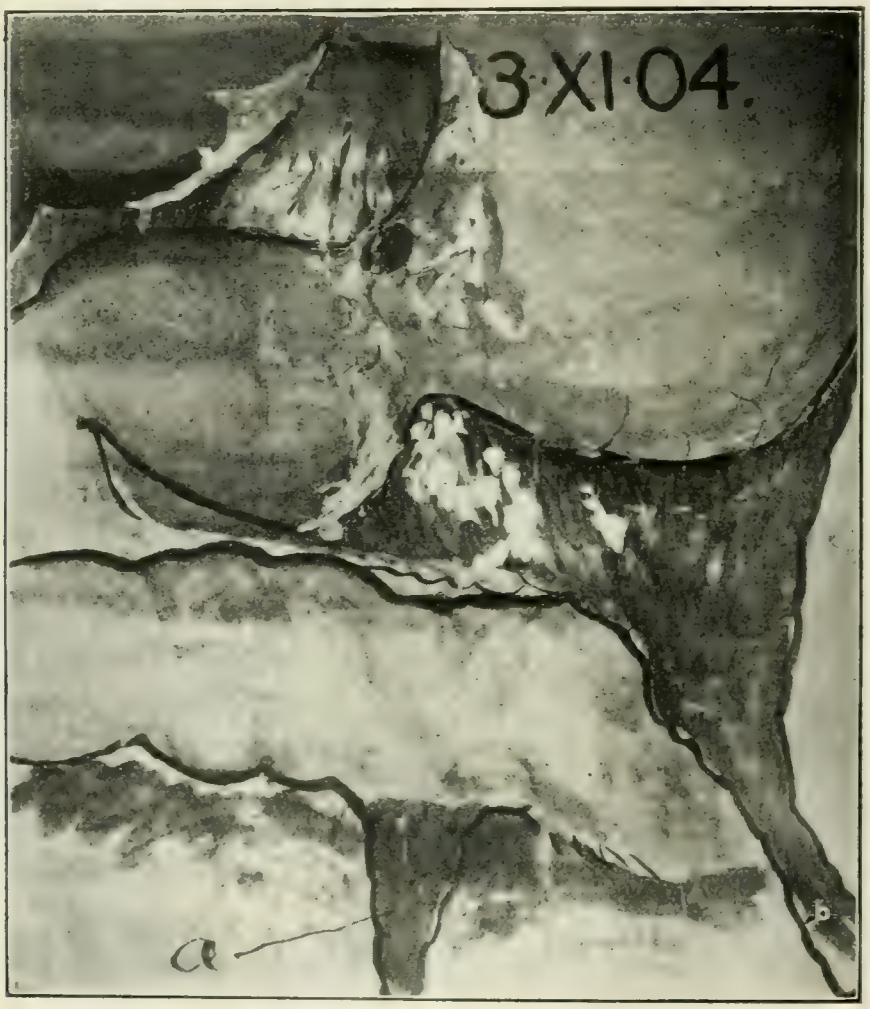


CASE 4.—Perforation near lesser curvature, early hour glass contraction of stomach.

A trace of iodoform may be rubbed in to favor plastic repair. If a gastro jejunostomy be required it is now performed. The flushing out should be completed by douching every peritoneal recess till the saline returns perfectly clear. Finally the abdominal wound is closed. We have always left a large Keith's tube in the pouch of Douglas, and have generally drained the site of perforation with a Mikulicz tampon and drainage tube.

The head of the patient's bed should be raised about six inches in order to favor the gravitation of any discharge from the dangerous absorptive region of the diaphragm towards the less susceptible pouch of Douglas.

Recovery is frequently uneventful. The chief factor affecting the issue is the nature of the organisms liberated within the peritoneal cavity and the power of tissue resistance to the toxins evolved. Fortunately we do not meet with organisms of excessive virulence within the stomach, and when there is no stagnation or fermentation of the gastric contents, the highly acid nature of the gastric secretion which we so frequently meet



CASE 14.—Second perforation in Case 4, fourteen months after last operation; marked hour-glass contraction; omental bands adherent to vicinity of umbilicus "A," and to lateral aspect of abdominal wall "B."

in such cases, inhibits the growth of most microbes. An additional source of sepsis may be due to the damage inflicted by the gastric extravasation on the viscereal peritoneum permitting the passage of intestinal organisms. Hence the value of a speedy recognition of the serious nature of the lesion, and the success which is likely to crown an early operation.

Naturally the size and position of the perforation, the date and the nature of the last meal, and the amount of material which escapes into the peritoneum are obviously of moment.

The chief prognostic is the pulse. A rate of 120 is to be feared, 130 and over to be dreaded. Temperature is of less value. The course after operation may be full of anxiety, requiring the exercise of extreme watchfulness and care. The pronounced thirst due to the loss of fluid by the peritoneal effusion may be allayed by rectal salines administered every four hours. The urine should be carefully examined and morphine given as indicated. If the pulse fail in strength and fullness and increase in rate, intravenous saline transfusion is most beneficial. One litre may be given, and when improvement is maintained thereafter for a couple of hours, even if there be a subsequent flagging of the pulse, transfusion may be freely repeated with every prospect of success.

Vomiting, if severe, persistent or accompanied by hematemesis is best combatted by gastriclavage.

There were eighteen cases, thirteen female and four male. The patients varied in age. Most were between twenty and thirty years; the extremes were twelve and a half and seventy-one.

Three to twenty hours had elapsed between perforation and operation in fourteen cases; of these, eight recovered, six died. Between twenty-one and thirty hours, two recovered, one died. One case recovered fifty hours after rupture.

The rapidity of the pulse as a prognostic is emphasized when we observe that in five of the fatal cases the pulse was over 130 before operation. We lost, however, one where the pulse was only 112, but the patient was seventy-one years old.

There were seven deaths in all; four females and three males. It was impossible to save Case 9, whose omentum was already gangrenous, or Case 16, with uremic due to advanced congenital cystic disease of the kidneys.

It will be seen that the mortality is not excessive, and that an early diagnosis may do much to render operation for gastric ulcer highly successful. There is no reason why the judicious country practitioner should not act in emergencies, and by a comparatively simple operation, not in itself dangerous, save lives that otherwise might incur still greater risk were they sent to a distant hospital.

Some points in regard to history, leucocytosis, micro-organisms, and after complications, may be ascertained from the

accompanying table. The plates serve to illustrate the appearance and position of the perforations. It would ill-become us in this section to meet without paying our tribute of reverence to the memory of the late Professor Mikulicz Radecki of Breslau.

In Mikulicz the alert glance, so full of sunshine, the deft, dainty yet powerful hand proclaimed the artist. His wondrously versatile scientific work, his earnest quest of truth, his whole life history breathed forth the catholic spirit of a true humanity.

A pupil of Billroth, a follower of the principles laid down by Lister, he was the pioneer and perfecter of aseptic methods. Carried off in the day of his strength by that disease the fell ravages of which he had himself done so much to mitigate, he has left an enduring fame as a great surgeon.

	Name. Age. Occupation. Date of operation. Event.	Previous History.	Onset.	Provisional Treatment.	Condition Prior to Operation.	Local Condition.	Operation.	Aftercourse.
1	Mr. W. L., 21; cabinet maker; 16, xii, '01; 26 hours: recovered.	Indigestion, several years; pain across stomach for 3 weeks.	Sudden, 2 hours after hearty breakfast, severe pain causing him to fall down; vomited shortly after and later twice or thrice.	Opium by mouth, and morphine.	P. 100; T. 100.8; R. 26; pain and tenderness over recti, especially tender above and to right of umbilicus; liver dullness less, quite gone within an hour; rectal tenderness.	Small ulcer, anterior near pylorus; perigastric clear fluid and lymph.	$CHCl_3$; upper part of abdomen dried out; pelvis washed out; drainage.	Good recovery.
2	Miss A. G., 23; domestic servant; 14, x, '02; 50 hours; recovery.	Two years' ago pain after food and anemia; well since.	Sudden pain at left costal margin, left shoulder and axilla, when lifting a couple of pails; had to lie down; vomited once blackish fluid.	Whisky poultices.	P. 125; T. 99; R. 26; tumid abdomen; general tenderness, maximum at left costal margin.	Large ulcer near pylorus on posterior wall.	Ditto.	Good recovery.
3	Miss L. T., 22; domestic servant; 21, iv, '03; 4 hours; recovered.	Five years indigestion; hypogastric pain for 3 days.	Sudden.		P. 126; T. 100.6; R. 30; general acute tenderness; no liver dullness.	Large ulcer on anterior walls near pylorus and lesser curvature; much clear fluid, lymph and potato.	Whole peritoneal cavity dried out; drainage.	Good recovery.
4	Miss M. Y., 21; housemaid; 22, ix, '03; 24 hours; recovered.	Three years' dyspepsia; hematemesis at New Year; passed blood by rectum from 17th to 20th Sept.	Sudden, violent, pain and vomiting; action of bowels this morning.	Morphine.	P. 128; T. 100.6; R. 24; Great abdominal pain, felt also in chest and shoulders; rigid abdomen; general tenderness pronounced above umbilicus; liver dullness much diminished.	Small round ulcer, anterior, near lesser curvature, five inches from pylorus; slight tendency to hour glass contraction.	Ditto.	Good recovery; symptoms again came on, fresh rupture, 3, xi, '04; see Case 11.
5	Mrs. W., 37; 25, xi, '03; 17 hours; died.	Indigestion all her life; great tea drinker; during last six months increased pain radiating from the back to the abdomen, relieved by vomiting.	Sudden pain and collapse.		P. 145; T. 103; R40; very tender tumid abdomen; no liver dullness.	Large ulcer anterior aspect of pylorus.	Laparotomy with cocain and adrenalin; $CHCl_3$ in small amount; posterior gastro-jejunostomy since pylorus was narrowed after suture of ulcer; ditto.	Improved somewhat; then had to be transfused; died twelve hours after operation. Sectio: Roughening of diaphragmatic pleura, no leakage at sutures.

	Name. Age. Occupation. Date of Operation. Event.	Previous History.	Onset.	Provisional Treatment.	Condition Prior to Operation.	Local Condition.	Operation.	Aftercourse.
6	Miss McE., 25; 31, i, '04; 18 hours; died.	Old indigestion.	Sudden, severe pain.		P. 124; T. 99.8; R. 36; does not look very ill; tender epigastric and supra-pubic regions; groins less so; rigid abdomen.	Small perforation, anterior, near lesser curvature.	$CHCl_3$; whole peritoneal cavity washed out; drainage.	Did well till following afternoon, when pulse rose, coffee ground vomiting came on, pelvis washed out; result negative; died 18 hours after operation.
7	Miss N. B., 25; domestic servant; 20, ii, '04; 10 hours; recovered.	For some years pain and vomiting after food; very anemic during last 2 months; has vomited after every meal last week.	Awakened by sudden epigastric pain and bilious vomiting; bowels have acted once.		P. 102; T. 100.2; R. 24; abdomen rigid; general tenderness, marked in epigastrium; liver dullness slightly less; some rectal tenderness; leucocytes 7000.	Small ulcer, posterior, near greater curvature in lesser sack distended with fluid; no fluid in general cavity.	Ditto.	Sickness and hematemesis next day; stomach washed out; vomiting ceased; transfusion necessary at night; good recovery.
8	Mrs. H., 40; 13, iv, '04; 6 hours; died.	Pain after food and vomiting for some time.	Sudden epigastric pain and collapse.		P. 140; T. 100.8; R. 40; abdomen rigid and exceptionally tender.	Small ulcer, anterior aspect cardiac end midway between the curvatures.	Ditto.	Transfused at intervals of 4 to 6 hours; she held her ground for 24 hours and then sank, 32 hours after operation. Sectio, general peritonitis.
9	Mr. M. Y., 48; laborer; 26, x, '04; 24 hours; died.	Eight years indigestion; pain and vomiting after food; intemperate; a daughter died of perforated gastric ulcer.	Sudden vomiting of and passage of black matter at stool; acute epigastric pain.		P. 132; T. 97; R. 30; fixed abdomen, tender, especially over pubis; no liver dullness.	Small clean cut ulcer near posterior aspect of pylorus: coffee ground like fluid in peritoneum; gangrenous omentum.	Distended stomach emptied with trocar and canula; removed gangrenous patches; ditto.	Transfused after operation; broncho-pneumonia, purulent sputum; rise of temperature; death on 7th day.
10	Miss Y, 27; 18, x, '04; 17 hours; recovered.	Has been under treatment for gastric neuralgia; pain after food.	Sudden epigastric pain and vomiting.		P. 120; T. 100; liver dullness diminished.	Small ulcer near lesser curvature and pylorus.	Ditto.	Good recovery.
11	Miss M. Y., 22; housemaid; 3, xi, '04; 19 hours; recovery.	See former history Case 4; good health since operation for perforation; quite recently pain after food and vomiting.	Severe abdominal pain and vomiting.		P. 104; T. 98.4; R. 24, at 11 a.m.; did not look ill; slight abdominal pain and tenderness; abdominal respiration; liver dullness normal; at 3.30 p.m. P. 110, T. 101, R. 28; liver dullness gone.	Ulcer near old site; marked hour-glass contraction; many omental adhesions and bands.	Ditto; posterior gastro-jejunostomy.	Good recovery.

	Name. Age. Occupation. Date of operation. Event.	Previous History.	Onset.	Provisional Treatment.	Condition Prior to Operation.	Local Condition.	Operation.	Aftercourse.
12	Miss B. K., 21; 19, xii, '04; 48 hours; died.	Epigastric pain after meals, shooting to back and shoulders, followed by vomiting of undigested food, eighteen minutes duration; better for a year, worse for last 12 months.	Severe epigastric pain and vomiting.		P. 168; T. 100.2; R. 32; whole abdomen very tender; tumid; no liver dullness.	Large ulcer near middle of lesser curvature; much fluid; flakes of lymph and food stuff.	$CHCL_3$; peritoneum washed out; drained.	Good recovery.
13	Miss H., 34; 17, i, '05; 9 hours; recoverd.	Two years ago had for two months pain after food; good health since; 14 days ago slight return of pain.	Sudden, severe epigastric pain.		P. 100; T. 100; R. 28; anxious expression; rather rigid abdomen; pain in hypogastric and left hypochondriac regions; maximum tenderness between umbilicus and ensiform cartilage and above pubis; liver dullness gone.	Small ulcer, near lesser curvature towards cardiac end; edematous extra peritoneal tissue.	Ditto.	Good recovery.
14	Master A. P., 12½; 15, ii, '05; 12 hours; recovered.	Pain after food for last twelve days, and slight cold.	Felt very ill; no great tenderness; vomited but passed a quiet night.	Hot fomentations.	P. 130; T. 101.2; tender abdomen; no liver dullness.	Small punched out, near middle of lesser curvature.	Ditto.	Signs of right basal pneumonia on 3rd day, on 8th day both lungs affected; P. 126, T. 103, R. 48; after an anxious time got well; oxygen inhalation.
15	Mr. T. W., 71; dairyman; 14, iv, '05; 9 hours; died.	Three years ago an attack of vomiting, pain and constipation; one year ago a second was an umbilical and double inguinal hernia.	Sudden sickness and vomiting of reddish material.	Opium.	P. 112; T. 98; R. 36; tenderness above and below umbilicus; liver dullness diminished.	Posterior aspect of pylorus, large ulcer; gas fluid and gastric contents in quantity.	Ditto.	Died 8 hours after operation. Sectio: peritonitis, suturing intact,
16	Mr. J. F., 32; laborer; 5, v, '05; 18 hours; died.	Intemperate; no data.	Sudden abdominal pain; distension.		P. 136; T. 98; R. 40; patient had a peculiar dazed look; was not clear headed and had dusky complexion.	Ulcer on anterior aspect of pylorus; much fluid; pure cultures colon bacillus.	Ditto.	Rapid sinking; symptoms of uremia; bladder empty. Sectio: Advanced congenital cystic disease of both kidneys, cysts in pancreas and mesentery, hypostatic congestion both lungs, peritonitis.

	Name. Age. Occupation. Date of operation. Event.	Previous History.	Onset.	Provisional Treatment.	Condition Prior to Operation.	Local Condition.	Operation	Aftercourse.
17	Miss C. K., 35 ; 3, vi, '05; 13 hours ; recovered.	For last 14 years intermittent attacks of sharp pain after meals in epigastrium and between the shoulders ; vomiting since Xmas ; well till last night ; drinks much tea.	Sudden epigastric pain and vomiting.		P. 120; T. 99 ; R. 26 ; abdominal tenderness ; liver dullness less.	Ulcer, anterior aspect ; cardiac portion, 2½ inches from lesser curvature; cultures from near rupture gave many colonies of streptococcus pyogenes, and a few of staphylococcus aureus; from the pouch of Douglas, pure culture staphylococcus pyogenes.	$CHCl_3$; peritoneum washed out ; drained.	Left sided pleurisy ; aspirated 10th June ; Frænkel's pneumococcus ; improvement ; empyema followed ; resection of rib ; strept. pyogenes ; still draining ; abdomen who e.
18	Mrs. C., 29 ; 29, vii '05 ; 14 hours ; recovered.	For several years pain after food, relieved by next meal ; well since March.	Sudden sharp shooting pain epigastric and umbilical regions and down left u per arm, it passed off completely but returned worse 1 6 hours.		P. 140 ; T. 100 ; R. 24 ; pinched look ; knees drawn up ; tense painful abdomen ; most tender in left hypochondriac and iliac regions ; liver dullness normal ; leucocyto-is ; 8,000.	Large ulcer middle of anterior aspect rather nearer greater curvature ; much gastric content and fluid ; bacillus of colon type in culture from pouch of Douglas and from near stomach; from latter site also a few cultures of a streptococcus.	Ditto.	Good recovery.

PRESIDENT'S ADDRESS.*

By W. D. Brydone-Jack, M.D.C.M. (McGill), Vancouver.

Mr. Chairman and Gentlemen,—The British Columbia Medical Association was organized in 1900. It is unnecessary to go into details of the formation; most of you have heard them before; but I would like to compliment the founders of the Association on the excellent constitution, by-laws and code of ethics compiled at that time, and would recommend that a copy should be placed in the hands of every medical man when he receives his license to practice in British Columbia, and I might add, a copy of the scale of fees in which I might suggest that only the minimum charge be put down, so that it would read from such and such a price.

The objects of the Association as set forth in the constitution are well worthy the earnest consideration of every medical man. For your information permit me to read them over.

1. The cultivation of the science of medicine and surgery.
2. The advancement of the character and honor of the medical profession.
3. The elevation of the standard of medical education.
4. The promotion of public health.
5. The furtherance of unity and harmony among its members.

The question that I would like to ask you is, How shall all these objects be best obtained, collectively and individually?

In order to make our Association a success, and so partially attain our objects, it is necessary that the members should be given something in return for their membership, and that the Association should comprise the whole of the medical men in the province. It is a matter of impossibility for all the medical men of British Columbia to attend our annual meetings, and if they pay a membership fee for the support of the Association they should receive some of the benefits of membership. At present the benefits to absentees is nil, therefore there is no object in their belonging to any of the Canadian Associations whether local, Provincial or Dominion. A society cannot be run without

*Delivered before the British Columbia Medical Association, July, 1905.

funds, and the subscriptions of those who do attend are manifestly insufficient to pay ordinary running expenses.

Our Canadian, Provincial and Local Associations all have the same objects in view, they are all actuated by the same motives, viz., the betterment and the advancement of the character and honor of the profession at large and the individual practitioner, the promotion of public health, and the cultivation of the science of medicine and surgery.

It seems to me that as all these associations have thus a common object and a common motive they should in some manner be blended together so as to further enhance their usefulness, and that some means should be devised whereby our objects would be better achieved than at present.

There is only one way by which this can be done effectually, and that is by uniting together, but in order to combine our forces we should have a link that will keep us united, and the link that I would propose would be a medical journal, which would publish the expressions of thought not only of the individual, but of our local, provincial and Canadian medical fraternity.

The plan that I would propose is this, that the Canadian Medical Association should be the head, that they should appoint the editors and make arrangements generally for the publication of the journal, and that the editors should be responsible to the Canadian Medical Association and its officers for the efficient performance of their duties. The provincial association would appoint sub-editors, whose duty it would be to assist generally in the publication, having regard more especially to their own districts or province.

The local association would appoint assistant sub-editors, whose duty it would be to report local meetings and local matters of interest to the sub-editors, and other matters of interest to the profession generally.

In this way a journal could be easily compiled which would be interesting to the members, at a minimum expense. As time went on and conditions warranted it, honorariums could be arranged for those taking an active part.

A paper of this kind would form a powerful lever in moulding the profession, in furthering any project that had for its object the betterment of the profession, more especially such a project as Dominion registration, etc.

I would further suggest that portions to be determined by the editor be printed in French.

In connection with the blending together of these associations

arrangements might be made whereby the local and provincial associations might have a properly credited representative at the Canadian Medical Association, one who could with authority voice the sentiments of his constituency, so to speak.

By means such as this a medical man practising perhaps in some remote district would be able to keep in touch with the rest of the profession, would know what was taking place in other parts of Canada, and all would work for the common weal of the profession.

Looking at the matter from a financial standpoint an arrangement such as outlined above might be made to prove of great benefit to all our organizations.

I do not know the exact number of practitioners in Canada, but presuming that six thousand paid to the Canadian Medical Association $2 each, this would give them, say, $10,000 for the journal and $2,000 for the Association, and this number ought by judicious management, be largely increased.

Then say: For the Canadian Medical Association journal and membership of the Canadian Medical Association, $2; for membership in provincial associations, $1; for membership in local association, $1; for membership in protective association, $1; making a total of $5 in all. Or a joint stock association might be formed under the auspices of the Canadian Medical Association, and each subscriber would be a shareholder.

Again, this would be an advantage in other ways. A medical man to be a member in full would have to be accepted by all associations, and this would possibly prevent some of the difficulties that have hitherto arisen.

There is great need of united and concerted action amongst the medical fraternity We are too prone to let things take their course in the hope that nature and time will overcome all difficulties. This may do well enough in certain forms of disease, but we must not forget that in this case we are dealing with human beings who may possess brains as well as bodies that have been warped and twisted perhaps from early environments, perhaps from defective education, perhaps from the effects of disease, hereditary or otherwise, and we must recognize these facts in endeavoring to attain our objects and apply our treatment accordingly. We must recognize the psychological side of the question as well as the physical, the one is as important as the other.

Our legislators and the public generally require to be educated in the knowledge that medical men from time immemorial

have devoted their time, their health, nay their very lives to the promotion of the public health and welfare, and that frequently without hope of reward. The public at large are indebted for their lives day by day to the conscientious work of the scientist practically applied. The question will arise in the minds of thinking men, how can the immense stores of knowledge of life in all its aspects which have been gleaned already by the industry of medical men, be best utilized for the benefit of the human race; how can our knowledge be still further increased, and how best applied for the betterment of our race.

The medical men are doing their share and more of the work. Are our legislators and the public generally helping us as they should, nay, are they not rather placing stumbling blocks in our way?

A great deal may be done in the way of educating the people by means of lectures, societies, associations, etc., but I believe that the proper place to start is among the children, more especially those that attend our High Schools.

A medical man, or several, should be chosen and paid by the Government; of course, the medical men should have special qualifications for work of that nature. They should thus be enabled to prosecute their studies, and researches along these lines, in the prevention of disease, and I feel assured that in time not only the communities which would adopt such a plan, but the medical men as a whole would be materially benefited. We should press for a Department of Public Health, and the Minister of this department should rank with equal power as possessed by other Cabinet officers.

Some of you may consider my ideas somewhat Utopian, but I feel assured that if the profession present a united front all these things will be given unto them, and many more. Let us then, as a united body, see to it that we collectively and individually receive from our country that recognition and consideration that our work entitles us to.

While in New York recently I noticed that they had a system of medical inspection of schools, that lectures were given in connection with the Public Schools on various subjects, especially foods.

2. What vaccination has done for the world.
3. Prevention of consumption.
4. The care of the eyes.
5. Colds—their prevention and treatment.

That there were numerous societies, such as societies for propagation of moral and social reform. There is right here a

great need of sexual education and social prophylaxis generally. There is need of medical supervision and education in our schools, and there is need of medical supervision in all public utilities.

The wealth of a country in general consists of all consumable utilities which require labor for their production, and can be appropriated and exchanged. These utilities may be divided into inner and outer utilities; further subdivided into free and economic.

It is with the economic utilities that we are principally concerned, and that should have a certain amount of medical supervision. Again, it is the duty of the Government to assist the formation in both the higher and lower regions of the industrial world of profound convictions as to social duties, and some more effective mode than at present exists of diffusing, maintaining and applying those convictions; and who more fit to undertake such tasks than the fully qualified, fully trained medical man.

By social duties here I mean those duties that we owe to our God, our country, our neighbors, and ourselves more especially, in their relation to health and disease.

This is, comparatively speaking, a new country; we are laying the foundations of a great Canada. It is for us, for our organizations, and for our associations to determine what the position of the medical man shall be in the future. Whether we shall have the status of honor that our studies, our years of application and research, our endeavors to uplift and benefit the human race directly and indirectly entitle us to, or shall we have a bare right to existence and a battle for life.

Let us return now for a few moments to a brief consideration of the objects of this association, as they affect our province and ourselves.

(1) Are we as an association doing what we can in the cultivation of the science of medicine and surgery? Are you individually working to that end? Are you giving to the rest of the profession the benefit of your experience, of your failures and successes. I would ask you to answer these questions in your own minds, and I would like to be able to speak thus to those who are absent as well as those present.

(2) and (3). As regards these, the advancement of the character and honor of the medical profession, and the elevation of the standard of medical education. We all feel assured that our present Council of the College of Physicians and Surgeons are doing all that can be done at present, but I am sure that I am only uttering their sentiments when I say that they want the

active and individual support not only of the association, but of each medical man in the province of British Columbia.

(4) The Promotion of Public Health.—Dr. J. C. Fagan, the Secretary of the Provincial Board, has done pioneer work in this direction; he has overcome many difficulties in the face of much opposition. Dr. F. T. Underhill is doing pioneer work along these lines in the City of Vancouver. The necessities for this work are many and unfortunately grossly apparent, and I would like to speak at some length upon this subject, especially as I have always taken a great personal interest in it, but I will not take up your time further than to ask you to loyally support both our provincial and our civic health officers in their adoption of measures for the promotion of the health of the community. I would mention more particularly pure milk and food supplies, inspection of meat, treatment and care of the tubercular, etc.

The furtherance of unity and harmony among the members is last, but not by any means the least important of the objects of this Association, and this can best be obtained by meeting together, discussing the matters of common interest, and thus knowing one another more intimately—by remembering that we all have common objects in view, and by working together in unity and harmoy for their attainment.

The establishment of a medical club and reading room, where members could meet and discuss questions of interest, and where books and journals of reference could be kept, would be of material assistance in establishing that feeling of equality and good fellowship which is a basis of unity of action and thought. Bacon says, "Equality and correspondence are the causes of harmony."

In conclusion permit me to quote the following from the "Merchant of Venice":

> "Look how the floor of heaven
> Is thick inlaid with patines of bright gold;
> There's not the smallest orb which thou behold'st
> But in his motion like an angel sings,
> Still quiring to the young-ey'd cherubims;
> Such harmony is in immortal souls;
> But whil'st this muddy vesture of decay
> Doth grossly close it in, we can not bear it."

Finally, I would thank those who have so kindly graced and honored this meeting, and would now draw your attention to the interesting papers, etc., which will be offered to you for consideration.

BILHARZIA HEMATOBIA.*

By R. Eden Walker, M.D.C.M. (Trin.), L.R.C.P. & S. (Edin.).

A word or two of explanation is due the members of this Association to account for my introducing to your notice a disease which is peculiar to the African continent, and which you might justly say does not greatly interest us in North America, so far removed are we from the natural geographical habitat of this small hematozoon. The advancement of science and civilization has, however, reduced distances, which were a few years ago insuperable barriers to an intimate intercourse between distant parts of the world, and it is now no uncommon occurrence to meet as citizens of our country those who have resided in districts where this disease is more or less epidemic. With regard to Canada, especially Western Canada, where so many of the regiments who went to aid the mother country in the late Boer war were recruited, this is particularly true. Within the past six months two cases of this, to me, rare disease, have come under my notice, both occurring in young men, who had previously lived in Manitoba, served in the South African campaign, and after the war returned to Canada, settling in British Columbia, and I have been induced to record the cases in the hope that they may be of interest to the profession, as doubtless others of our volunteers must have contracted this disease, and presented themselves to physicians throughout the country for treatment.

History of Cases.—G.C., age 30, previous to going to South Africa had always been healthy. No illness except measles in childhood. Family history, good; went to South Africa in 1900; returned to Canada for a short time and went back to South Africa in 1903; was taken ill in June of that year with what he called dysentery; although ill and unable to work for one week did not go to the hospital; had frequent bloody stools and at the same time began to pass blood in the urine. The bloody stools lasted several weeks and gradually passed off, although he has had several attacks of diarrhea since, when blood appeared in the stools. The blood in the urine, which was at first pretty constant, for the past year

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has been intermittent; it always comes at the end of micturition; hard work. or violent exercise aggravates it. The patient at the outset lost weight, and for some time after the so-called dysentery he was in bad health, and could do very little.

Present Condition.—The patient presented himself for treatment for his urinary trouble. Complains of intermittent hematuria, especially after hard work. He has to urinate more frequently than normal, but complains of no pain or discomfort of any sort. He is otherwise in fairly good health, and able to do his work as a teamster. Has, as has already been stated, occasional attacks of diarrhea with blood in stools. Condition of urine: Color, pale straw, cloudy with small shreds of mucus and fibrin floating in it, some shreds bloody. Reaction acid; Sp. Gr. 1022. Sugar, none. Albumen present in varying qualities, at times a mere trace, at others causing a heavy cloud. Microscopically: Blood and pus cells in considerable quantities, and with low power ova of the Bilharzia can be seen. (I hope to be able to show them.) These ova are mellow, sled-shaped bodies, oval at one end, with more or less of a spire at the other. With a high power the embryo can be seen in the egg case.

Case No. 2.—A St. L. C., aged 30; previous and family history good. Went to South Africa in 1900 when he had an attack of dysentery, and was ill in hospital for three weeks. This was probably true dysentery. In 1903 had a second attack of dysentery, with bloody stools and blood in the urine; did not go to hospital. The blood continued in stools for some time, and gradually passed off. The bloody urine was continuous at first, but of late has been intermittent in character. Worse after hard work.

Present Condition.—Has intermittent hematinic with desire to pass urine too often; no pain. Urine: Pale straw colored; cloudy; no shreds. Sp. Gr. 1020. Reaction acid. Albumen present in considerable quantity. Microscopically: Blood and pus cells, oxalate of lime crystals; ova of Bilharzia.

The history and clinical picture of these two cases is almost identical, and at first one might easily be led to think that we were dealing with some form of chronic cystitis, calculus, or Bright's disease; indeed, with regard to one of the cases mentioned, it was due to the discovery of albumen in the urine when making a urinalysis for life insurance that the true character of the disease came to light.

A few words as to the disease, and the parasite which causes it: The parasite which causes this disease was discovered by Bilharzia in 1851, and its habitat is the portal vein of man,

monkeys and dogs. The male worm is about half an inch in length, the female slightly longer and thinner than the male. The complete life history of Bilharzia is not known, but it is supposed to pass through the body of some other host besides that of man, etc. Repeated efforts to infect dogs or monkeys by feeding them on living embryo have been in vain; neither will the embryo hatch or live in blood or urine. The exact mode of injection is also unknown, but the best authorities are inclined to the view that the embryo may penetrate the anus, urethra or skin while bathing in infected streams. This accounts for the fact that young males are most frequently affected. So far as at present known the disease is confined to the African continent, being most prevalent in Egypt, Natal, and the eastern parts of South Africa, although almost all parts of the continent are more or less affected. The symptoms which present themselves are much as found in my cases, beginning either with blood in the urine or stools, or in both; when the neck of the bladder is affected much pain may intervene.

Secondary symptoms are calculus formed with the detritus as a nucleus, pyelitis, hepatic abscess and peritonitis.

Bilharzia is found in various parts of the body, but its powerful focus seems to be the smaller branches of the portal vein, and the harm wrought seems to be chiefly by the blocking of the smaller vessels by the countless ova which are thrown off by the female, causing chronic congestive inflammation and the formation of new growths.

Prognosis depends somewhat on the amount of infection. Long residence in an infected country makes the cure less certain. In boys the disease seems to cure itself at puberty. In most cases in adults the prognosis is not so good.

Little can be done in the way of treatment. I found urotropine, grs. vii., improve the condition of the urine, and lessen the amount of pus and blood; but when we consider that the chief seat of the disease is the portal vein we can hardly expect medication of any kind to be curative.

OBSERVATIONS ON TUBERCULOSIS IN NEW ZEALAND.*

By W. Stephen, B.A., M.B., Vancouver.

Mr. Chairman and Gentlemen,—My remarks will deal principally with the crusade against tuberculosis in New Zealand. My excuse for reading the paper is the all-importance of the fact that a united, well directed and effective crusade should be made against the scourge in British Columbia. During my practice of some five or six years in New Zealand I witnessed the different stages of the crusade there. 1st. The stage in which the public were indifferent and ignorant on the subject, and the medical profession stood as paralyzed, without hope, and saying that effort was useless. 2nd. The stage of agitation in which a few enthusiasts kept pegging away with but indifferent success and many discouragements from their fellow-brethren. 3rd. Came the opportune moment, when a wave of enthusiasm and hope spread over all—the authorities, the medical profession and the public—and unitedly there is a thorough systematic attack on the enemy, carrying on their banner the motto, "We mean to practically win the fight against the enemy in twenty years."

British Columbia has had its first stage. Thanks to the energy of Dr. Fagan and others we have had our second stage, and now the time seems at the flood for a wave of enthusiasm and hope to carry us to a systematic effort, in which unitedly the legislature, the profession, and the public will join hands in an energetic continued attack against the great white plague.

Before proceeding to the main subject I wish to dwell for a moment on three points that were emphasized by watching the effects of tubercle amongst the native Maoris, as, whilst practising in a seaside town and district I had the appointment from the Government to medically attend all natives within a radius of thirty or forty miles of the town. The natives are specially susceptible and fall an easy victim, the scourge spreading through them almost like a devastating fire, and I could not help noticing the following points:

Tubercle is a House Disease.—Whenever I saw and knew a house or houses to be infected then I knew there would be and saw a funeral procession of deaths, one after another; but

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I also saw that if the natives lived in a house that had not been infected then they never took consumption.

2. The Frequency of Infection.—We are accustomed to think there is not much danger of being infected, but we forget how well fortified we are to resist sucessfully, and how many times we have been infected that we know not of. The native who falls an easy victim if infected, if he goes to live in an infected house, almost certainly becomes infected in a very short time. As an instance: A native girl returned from the hospital, and went for two months to live with a native family who were previously healthy. She infected five out of a family of six; two of them dying before she did. More than once have I seen young men who had lived with white settlers or amongst natives whose houses were not infected, and then go and live with natives whose houses were infected; and just so certainly would they fall victims.

3. The Influence of Heredity.—There is no doubt that there are certain types of families who are more susceptible to consumption than others, and in examining their whole lineage we will get a larger proportion of consumption than normal. But formerly, and even yet, in the lay mind, and in the mind of many medical writers this type is always looked upon as the result of heredity, meaning that the weakness towards consumption is due to the fact that their forefathers had been attacked by this enemy. I wish you to notice how is it possible that this agrees with the following: The native is very susceptible and falls a quick victim to tuberculosis. Why is this? He lives the open-air life; he is strong and robust. Measles to the natives was at first a very malignant disease, but heredity in a short time made it the mild disease that it is to us. Is it not so that heredity has produced in the white race a partial immunity to tubercle. Whereas the native has no help from heredity, as it is a new disease to them, unknown to them before the days of the white man.

To return to the main subject of the crusade.

Several years ago New Zealand was threatened with an invasion of Bubonic plague; it found the health regulations very ill adapted to meet such a foe; then the public health was looked after by separate local health bodies whose medical health officer was a local doctor in private practice. This is a very unwise and useless method, as, if he does his duty, he injures his private practice. Moreover, one local body not doing its duty made null and void the efforts of all the others, so it was necessary to

have central direction and authority. At one sweep Sir Joseph Ward was instrumental in doing away with the imperfect old and enacted a complete new health department, which to my mind is the most perfect in existence..

A short epitome of it is as follows: 1st. Public Health Department with a Minister of Public Health. 2nd. A supreme and chief medical health officer for the whole colony, who is commander-in-chief of all forces. 3rd. Divisional health officers. The whole of New Zealand is divided into about seven larger geographical areas and a few smaller ones, and over each of these areas is a health officer with his sanitary instructors. All these give their full services to the work. All local medical health officers are abolished. Local health bodies work in unison with and under the direction and guidance of the divisional officers who are supreme in all matters relating to public health. There is a just division of expense between the government and local bodies. The Public Health Department made a most efficient crusade against Bubonic plague, and when the crusade against Bubonic plague was over they had machinery in good order to make a crusade against the great white plague of tuberculosis

At this time the public was becoming aware of the dangers of tuberculosis, particularly the inhabitants of health resorts, and after a certain amount of agitation it was decided to conceive and carry out an efficient and prolonged attack against the scourge.

They decided that a well conceived plan must include the following points:

1. United effort of legislature, health department, medical men and public.

2. Public must be educated in the true knowledge of the disease, particularly as to its spread.

3. Every case of the disease in the colony must be known and kept track of as long as it is a source of danger.

4. Every case being a focus of danger, then every case must be efficiently treated, both to bring about cure when possible, and in any case so as to be no danger to others. Treatment comes under three heads: (a) Sanitorium for early incipient cases. (b) Home treatment where it is efficient. (c) Additions to the local hospital for local needs.

5. Disinfection of all houses that are infected.

6. Regulations to prevent consumption coming to the colony.

7. The economic question—a wise distribution of the burden between central and local bodies.

Before taking up each of these points seriatim I might state that in New Zealand the community do a great many things not done in other countries; they own and work for their own benefit most of the public utilities; they own their own railways, postoffices, telephones, telegraphs, etc.

They have different ideas from us as to the duty of one to another in society. Their system might be called fraternalism. They have succeeded, almost to a Utopian extent, in removing all those unjust laws and social conditions which allow one man to rob and prey upon his fellow-man. This being so it is easy to make the burdens of the community fall justly on all, and this being so the community can easily undertake to do anything that is for its own good, for the burden will fall justly. They looked on the subject of tuberculosis, not from an altruistic standpoint, but from one of public utility. We know now that the strong and weak both may be affected by tuberculosis. All cases are a danger to the community, and it may be my accident to be the next to be infected. Then why not as a community, for our own benefit, grapple with the subject. Why not now pay a premium so that if I am the next to be infected I have a hospital at my control, not as a charity but as a right. And moreover, each premium paid helps to lessen my risk to infection. To take up the points seriatim:

1. It is very necessary to have the co-operation of all the lgislature, the public health department, the medical men and the public. Only by united effort in which all are interested, and in which all help, can we ever succeed in such a task. The chief health officer is commander-in-chief, the other health officers are the divisional commanders, the Nogi and Kuroki under Oyama; the medical men are the scouts who bring all intelligence of the enemy to the commanders. And as in the present warfare, the soldier must be an intelligent one, though directed he must use also his own individual instruction; so we in this fight must have the patriotic, intelligent co-operation of the public.

2. The public were educated as much as possible by an agitation in the public press, all points of public interest being published widespread in all papers. Placards were got up by the chief health officer, dealing chiefly as to how to prevent being a danger to others; these were posted in every railway station in the colony, also in every postoffice. Also every patient was supplied with all the concise literature on the subject for his own perusal.

3. To Keep Track of Each Case.—Tuberculosis must be a

notifiable disease. This is the law, and it is the duty of the doctors all over the colony to notify each case, also keep the central authorities posted at all times of any change of address of cases so that all may be kept track of. By this means each and every case in the colony is known and kept in view.

4. Treatment.—(a) It was decided to have government sanitoriums in suitable localities for the treatment of incipient cases; this is found to be the most effective as to cure; also all cases are free from causing danger to others, and it is by all odds the cheapest method. Cost to patient is free, or if patient is able a maximum of $5 per week is charged, the rest of cost is borne by the public community, *i.e.*, the government. There are, of course, private sanitoriums run on commercial basis for those who prefer them, and who are able to meet the expense.

(b) Home Treatment.—All cases in which the local doctor is satisfied that efficient home treatment, with all care to prevent danger to others, is carried out then this done, and it is important to realize that excellent results may be obtained at home, and with no danger to others, when due care is taken; for a large number must always be treated at home.

(c) This is a very large class, the incurable cases, in each local district who enter from ignorance or poverty, or from many causes combined are not able or do not get suitable treatment at home. It is this class that sows the seeds of death broadcast, and it is this class that should be cared for, for the sake of the welfare of the community. It has been decided that this class must be treated locally. It is unsuitable to take them away so that their dear ones cannot see them. It is also important that each local body should feel that it must undertake its own burden and not throw the responsibility on others.

5. It is compulsory to disinfect by approved means all infected houses. No landlord dare give for rent any house without a clean bill of health.

6. If New Zealand is going to look after all her own cases of tubercle then it is necessary that she be not a dumping ground for the tuberculous patients of other countries. Suitable laws are in force to prevent this taking place.

7. The Economic Question.—New Zealand has local hospitals in all districts; these are government hospitals; and the management, direction and support is by the government and local bodies combined. The management and cost of the care of tuberculosis patients is similarly borne jointly by a wise decision between the central and local bodies.

New Zealand as a community does many things which in

other countries is left entirely to charity. Every citizen there feels that the hospitals are his to which he has a right to go if misfortune overtakes him, and he is not there a pauper to whom charity is doled out. With such an efficient system, effectively carried out, there is no reason why in twenty years the percentage of cases of tuberculosis will not be reduced to a minimum.

INFECTIOUS DISEASES AND THEIR REMEDIAL AGENTS.*

By C. J. Fagan, B.A., M.D., Victoria, B.C.

It is only during recent years that the nature of infection has come to light and yet there is much to be learned. Observed facts are explained by novel theories and indeed our conceptions of disease have been modified and in some instances entirely changed. In the paper I present I have endeavored to give a short account of the principal ascertained facts, and of the general trend of speculation on the subject of infection and immunity, and I have tried to explain the action and practical value of the remedial agents which have been introduced in the form of serums, vaccines and toxines.

Our bodies are built up by groups of specialized cells, which mutually depend on each other for their normal development and continued healthy existence. The cells of the different organs have their different functions, the healthy performance of which, is necessary to the well-being of the whole, and so disease is nothing more than the result of impaired or perverted cell action.

An infectious disease results when a specific, pathogenic micro-organism which having gained admittance to the body and having found conditions favorable, grows and multiplies, and elaborates a chemical poison which induces certain characteristic effects.

It is a matter of common observation that all animals are not alike affected by the same disease, and that epidemics which decimate certain species are wholly without effect upon the health and life of others. To give a complete and satisfactory

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explanation of these observed facts would be a task entirely beyond me and indeed impossible within the compass of a single address. From what I have read I am satisfied that the question of immunity is not solved by any single theory, but depends upon many properties of the animal body. Meltzer in a paper read at the Congress of American Physicians and Surgeons in 1900 rightly says, "I maintain in the first place that in the struggle against bacteria the defence of the body is not carried on exclusively or chiefly by a single element. It is neither the body fluids, nor the leucocytes, nor the other cells alone which can claim the exclusive merit of maintaining the health of the body, but each and every one of them has its variable share in attaining the desired end."

It has long been known that in the case of many of the infectious diseases, persons who have suffered from one attack were to some extent protected from any recurrence. Inoculation from a mild case of smallpox was practised in the East long before it was introduced into Europe. From Turkey it was brought to England in the year 1721. In the year 1796 Jenner performed his first vaccination. His discovery was the result of observing that milk-maids very often contracted a mild disorder (cow-pox) communicated by handling animals when they were suffering from a peculiar vesicular eruption of the udders; and that those who had been thus infected were in future protected to a great extent against smallpox. It was of course impossible to give any explanation of the exact mode in which an individual who has suffered from one attack of smallpox, or other infectious disease, was protected against its recurrence so long as the true nature of infection was unknown. This knowledge is the fruit of the science of bacteriology.

The discovery by Pasteur of the cause of fermentation was the first step. The resemblance between an infective disease and the process of fermentation was seen to be very close. Thus the infection corresponds to the addition of yeast to a saccharine solution; the incubation with the time which elapses before fermentative changes are seen in the liquid; and the onset of the disease with the rise of temperature and evolution of gas seen when the solution begins to ferment. When Pasteur had identified the yeast fungus as the cause of fermentation, and before any pathogenic organisms were discovered, it was asserted by many scientists (Henle in 1840 and later Trouseau) that vegetable organisms were the causal agents in infectious diseases.

Davine, in 1850, was the first to discover a bacterium. He

isolated the bacillus anthax and showed that the disease could be conveyed by its means. This opened up a new and vast field of research and showed the way to our present knowledge of infective processes, and bacteria were soon identified as the cause of diphtheria, tetanus, glanders, tuberculosis, pneumonia, etc.

When the bacterial causation of infective diseases was firmly established, naturally various hypotheses were put forward to account for the way in which these organisms produce their pathogenic effects. Anthrax being the first discovered was the first to be investigated in this connection. Post-mortem examination showed these rod-shaped and comparatively large organisms, lying in the capillaries of most of the organs and appearing in places to block up the blood-channels. The suggestion was therefore made that a process analogous to embolism was the cause of the morbid symptoms. This view was disproved later when it was shown that in other infective diseases the bacteria are comparatively few and that in diphtheria and tetanus the organism remains localised. Another suggestion was that the parasites seized on the nourishment circulating in the blood and so starved the tissue cells. This of course was untenable for the same reason as in the first theory.

Another theory was that the micro-organisms may act either directly or indirectly as ferments, splitting up complex proteids in the tissue and producing among these split products the specific poisons which induce the characteristic symptoms of the disease. While it is well known that powerful poisons originate from the cleavage products of bacteria it is now accepted that in infectious disease, the micro-organisms secrete, as products of their vital activity certain poisonous substances which kill or injure the cells and so produce disease. This theory supposes that the formation of bacterial toxins is a synthetical, rather than an analytical, process.

Recovery and Immunity.

When bacteria were definitely established as the casual agents in a number of infectious diseases, enquiry naturally followed as to explanation of observed facts with regard to these diseases and on lines suggested by a study of the life history are peculiarities of the organisms. Thus the self limitation in acute pneumonia which tends to end suddenly about the seventh day and typhus fever on the fourteenth, etc., were fit subjects for enquiry, also why the micro-organism which caused the condition

should not live indefinitely in a soil which showed itself so suitable for its growth and development.

Pasteur advanced that as a plant cannot live for more than a certain time in a given portion of soil, so, bacteria use up all existing material present in a given animal body. This " exhaustive " theory of Pasteur was soon abandoned, as it was found possible to cultivate micro-organisms on medium from animals just recovered from a disease due to these same organisms.

Chauveau propounded a second theory, that the excretory products of living organisms are generally poisonous to the organisms themselves, and showed that the life of the yeast plant is arrested by the presence of more than a certain percentage of alcohol, which is formed by its activity. This theory was not accepted as it was supposed that in living animals the excretory products of bacteria were rapidly passed out of the system. During the last few years Emmerich and Low have proved conclusively that most of the pathogenic bacteria produce both in culture and in the living body soluble substances which are capable of digesting the organisms which produces them. There substances are called "enzymes." When then the bacteriolytic enzyme formed in the animal body has reached to a sufficient degree to dissolve the bacteria which produces it, further growth is impossible, and the disease is arrested. This explanation of the arrest of infectious disease is now accepted, but the discovery of Emmerich and Low goes further, for it shows how immunity to certain diseases is established. When animals are immunized by successive treatments with a micro-organism or its products the blood serum and other fluids obtained from the body acquire either bactericidal or antitoxic properties. In some instances the immunity secured is wholly antibacterial, while in others it is anti-toxic, depending on the micro-organism used.

We will first treat of bacterial immunity:—It may here be pointed out that toxin is prepared in two ways: First, we have the toxin prepared in suitable media from the organisms of tetanus and diptheria from which the toxin is freely thrown out with the surrounding medium. In the case of most of the other pathogenic bacteria as in typhoid fever, tuberculosis, cholera, plague, streptococcic and staphylococcic affections the toxins are not thrown out into the culture medium, but remain in the bodies of the bacteria themselves and are prepared by triturating the bodies of the bacteria and extracting the residue. When animals are immunized by injections either of this residue or the actual germ, a serum is produced which is not anti-toxic in the

sense of neutralising the poisons of the micro-organism, but which destroys the bacteria themselves. Such a serum is said to be "antibacterial" or "bactericidal" instead of antitoxic. In some instances this serum manifests its power by an inhibitory action on the growth of the germ, or by partially depriving it of its capacity of forming toxins or by completely dissolving and destroying the invading germ. Pfeiffer was the first to discover that if cholera bacteria are placed in the peritoneal cavity of a guinea-pig which has been immunized to cholera, the bacterial cells are dissolved by the peritoneal fluid. This can be plainly seen by removing with capillary glass tubes portions of the bacilli which will be found to be undergoing solution in the surrounding fluid. This then is how immunity to infection by certain species of bacteria is brought about.

We can now review the subject of acquired immunity to bacterial toxins. The diseases which stand out prominently as representatives of this class are diphtheria and tetanus, during the progress of which in the living body the bacilli do not become generalised in the system but remain localised at the point of infection where they form their toxins. The nature of diphtheria toxin was first demonstrated by Yersin and Roux but to Ehrlich is due the honor of having first advanced an acceptable theory as to how these poisons act and are counteracted. Ehrlich's explanations is now almost universally accepted and is contained in the views he expresses on the general subject of immunity. I may here state that this theory explains three obscure points:—

(a) Natural and acquired toxin immunity;
(b) Toxine action;
(c) Formation and action of antitoxine.

Ehrlich believes that the toxic action of toxin upon bioplasm is due to a chemical union, and assumes that the toxin molecule possesses two different combining groups, one which may be desigated as the "haptophore" group and another the "toxophore." He also assumes that the living matter of the living cells of the animal body consists of a huge molecule, or group of molecules, with a number of atomic groupings, or as they are termed by the organic chemist, side-chains, which are ready to enter into combination with other suitable atomic groups, under certain conditions. The atomic grouping of these side-chains is so constituted that they are able to fix to themselves certain definite food stuffs important to the cell life. The relationship of each functioning fixing group of the corresponding groups must be specific—that is, they must be adapted to each other as key is

to a lock or male and female screw. From this point of view we must regard the relation of the toxin to the cell.

Ehrlich then advances that the toxins become anchored to the cells by means of their haptophore groups, and should the cells not possess side-chains which fit these haptophore groups, the toxophore groups cannot become fixed to the cell, which therefore suffers no injury—that is the organism is naturally immune.

The formation of anti-toxin can now be explained. When a small amount of a bacterial toxin is introduced into the body of a susceptible animal, it, by virtue of its haptophorous groups, combines with some cell in the body.

If the toxin introduced is in sufficiently large quantity, a number of side-chains to a cell are engaged, and their physiological function is destroyed and the cell dies. If, however, the dose of toxin is sub-lethal, then but one of two side-chains are attacked, they are themselves killed and drop off, but the cell escapes. The cell then proceeds to put out a fresh supply of the particular kind of side-chains and as frequently happens in living bodies the repair goes beyond the original supply and the cell thus becomes furnished with an increasing number of side-chains capable of fixing the particular toxin. It is thus able to deal with a larger and larger amount of the poion in the blood around it. In this way animals gradually become able to tolerate much larger doses. As this process goes on the cell forms side-chains to a point of over compensation, and some of them free from union to the toxin are cast off into the lymph around the cell and ultimately get into the blood. These free side-chains constitute anti-toxin.

For the production of anti-toxin it is necessary to prepare a toxin of the highest possible virulence from certain strains of the bacillus. When the organisms have grown for about a fortnight on the culture fluid, the latter is passed through a porcelain filter; the bacilli are thus removed, and the filtrate is ready for use. The horse selected for the production of the anti-toxin is tested with mallein and tuberculin to ensure that it is free from glanders and tuberculosis. If healthy 1-2 to 1 c.c. of toxin is injected. The injection is followed by considerable local reaction causing a large swelling, while general constitutional disturbance and fever is present. Another injection is given when the disturbance is cleared up, and is repeated and repeated in gradually increasing doses till as much as a litre, or 35 ounces may be given at once without reaction.

The antitoxic power of the blood rises gradually, reaching its highest in about six months. The injection of each dose of toxin is followed by an immediate fall in the anti-toxic value of the serum, but this rises again in the course of a day or two to a point higher each time than that at which it previously stood.

The strength of antitoxin can only be measured by means of physiological tests, and for this purpose guinea pigs are used, as it is found they react in a very constant manner to the poison, those of the same weight being killed in approximately the same time by equal doses of a given toxin. A unit-dose of toxin is that amount of diphthereal poison which just suffices to kill a guinea-pig weighing 250 grammes, in four days. This is known as the "minimal lethal dose."

A unit of antitoxin is the smallest quantity, which being mixed with one hundred minimum lethal doses of toxin and injected into a guinea-pig, prevents the appearance of any toxic symptoms.

Clinical Department.

A Case of Tuberculous Ulceration of the Ascending Colon Simulating Appendicitis. G. Grey Turner, M.S. (Durh.), F.R.C.S. (Eng.), Surgical Registrar, Royal Infirmary, Newcastle-upon-Tyne, in *The Lancet*

In October last I was asked by Mr. J. F. Thomson to operate on a case of appendicular abscess. The patient was an unmarried woman, aged 34, who came of a fairly healthy family; four brothers and three sisters were alive and well, but her father had died at 70 years of age from cancer of the bowel, and there was no history of tuberculosis. She had always been of a bilious temperament and often had attacks of vomiting with severe headache and constipation. During the eighteen months preceding her illness she had been feeling "hangy" and "listless" without exhibiting any definite symptoms. On Oct. 9th, about 2 a.m., she was awakened by a severe pain in the right side of the abdomen and chest; there was no sickness at that time. After a cup of tea and some brandy the bowels were moved, and she felt more comfortable until the evening when the pain returned and was "fearful." Mr. Thomson was called in and diagnosed appendicitis; he gave her medicine which relieved the pain. With the return of pain she felt very sick, but only vomited once after a cup of tea. Mr. Thomson found a tender lump in the right iliac fossa which the patient had not noticed. From this time until the 13th, when I saw her, she continued to have pain in the right iliac fossa but there were no other symptoms and the pain gradually diminished though the lump did not. The patient looked white and run down; the pulse and temperature were normal though the latter had been as high as 102 deg. F. In the right iliac fossa was a very hard, tender mass about the size of a crown-piece. Two points struck me at the time—that Mr. Thomson had noticed the lump at the beginning of the attack and that it was unusually hard. Nevertheless I thought that we should find an infected appendix covered over by omentum.

Arrangements had been made for an operation at the patient's own home and it was proceeded with at once. I made an oblique incision four inches long parallel to the outer part of Poupart's ligament and the iliac crest as for a case of appendicular abscess. The appendix was normal and the omentum was not down in the neighborhood. There was a hard lump in the outer

and posterior wall of the cecum (as I then thought, but an examination of the part removed showed it to be above the ileo cecal junction, and therefore in the ascending colon): the subperitoneal tissues in the sulcus on the outer side of the colon were very edematous. The mass appeared limited to the bowel, for the latter could be easily rocked from side to side. There were no enlarged glands and no deposits on the surface of the peritoneum. The cecum appeared normal and there was no evidence of tubercle in the lower ileum. I was in doubt as to the nature of the mass. The sudden onset of the illness and the edema of the tissues around suggested an inflammatory origin, but the hardness of the lump made me very suspicious of new growth. I was further biased in favor of the latter supposition for I had recently seen two similar cases both of which turned out to be cancer. I was in doubt as to the best course to follow. If the mass was purely inflammatory it would be sufficient to leave in a drainage-tube and a gauze pack, treating the case as one would an infected area following appendicitis. If it was tuberculous then a lateral anastomosis would relieve the patient meanwhile, and give the ulcer time to heal, but if it turned out to be malignant the most favorable opportunity for removing the disease would be lost. I thought that the mass was most likely a new growth, and that the interests of the patient would be best served by its removal and this I decided to do.

There was no special difficulty in the operation and I had the assistance of a good nurse. The lower two inches of the ileum, the cecum, and three inches of the ascending colon, together with the termination of the mesentery, were excised. I closed the bowel ends and made a lateral anastomosis by direct suture. As a safeguard a drainage-tube was brought from the involved area out of a separate opening in the right flank. The parietal incision was sutured in three layers with chromic catgut. The patient made an uninterrupted recovery so far as the abdominal condition was concerned, the bowels were moved without medicine on the third day, she was well enough to be up at the end of a month and was out soon afterwards. The wound healed by first intention and appeared to be going on perfectly, but at the end of the fifth week a chronic gut suture worked its way out followed by several others. This gave the patient more concern than any other part of her convalescence, though after this little episode terminated the scar was as strong and sound as could be desired.

On examining the parts removed I found that there was a small diverticulum on the cecum just below the entrance of the ileum. On laying open the cecum and colon the hard mass was

found on the posterior wall of the latter just above the entrance of the ileum. It was composed of the indurated tissues surrounding a cavity beneath the mucous membrane, but it felt very much softer than it did *in situ*. I therefore began to fear I had removed the bowel whose only crime was the harboring of a simple ulcer. The cavity had a narrow mouth, so that it was not very obvious from the inside of the bowel, and its interior was about three-quarters of an inch in diameter and had sloughy walls. It lay in the submucous tissues and may have been lined by mucous membrane, but all traces of this had disappeared and no evidence of its presence was found on microscopical examination. I fully expected to find a foreign body as in the somewhat similar cases described by Bland-Sutton, but there was none. On microscopical examination the wall of the adjoining mesentery was carefully examined but showed no evidence of tubercle, and there were no other ulcers or indurated areas in the parts removed to suggest further microscopical examination. The whole appearance suggested that a diverticulum had become infected with tubercle, and at a later stage with sepsis. The presence of the diverticulum at the extremity of the cecum would support this view, for they are usually multiple, but I did not notice diverticula on the other parts of the colon incidentally exposed during the operation.

It is an interesting fact that there were no signs of tubercle elsewhere, and that the patient has very much improved since the operation. A careful consideration of this case leads me to think that the course of events was somewhat as follows: A diverticulum became infected with tubercle, and as a consequence became ulcerated. The contents could not be regularly removed by the actions of the bowel and decomposition arose. Thus to the tubercle sepsis was added and the acute symptoms were coincident with the onset of inflammation. The edema of the retrocollic tissues clearly showed the presence of acute infection, for it is a constant attendant of sepsis in the vicinity. Though, strictly speaking, the ulcer was in the colon and not in the cecum, it may probably be as accurately described as an example of typhlitis with commencing perityphlitis as many others that have been suffered to bear this nomenclature. If we consider the septic factor in this case as the important feature it may be looked upon as an example of a rare condition, since it is certain that typhlitis and its complications are, in the great majority of cases, due to disease originating in the appendix. Still, cases of true perityphlitis not of appendicular origin do occasionally occur and an example from perforation

of the cecum by a pin has come under my notice. From another point of view the case is interesting, for it shows how sometimes the addition of sepsis to tubercle may serve a useful purpose by drawing attention to the disease at a time when the local manifestation at least can be efficiently dealt with, just as a tuberculous ulcer in the appendix may rupture, so bringing on itself the ban of surgical interference. Further, the case is a useful reminder of the need for care in the diagnosis of swellings about the cecal region. The diagnosis of appendicitis is more often correct than that of any other abdominal disease and this is so much realized that any other suggestion is apt to be treated with but scant courtesy.

Within the last two years I have seen a couple of cases very similar to the one here recorded. In both there was a history suggestive of appendicitis and both were diagnosed as such, but in both a hard mass in the cecal region turned oct to be malignant disease of the bowel. It is not always easy to make the distinction, and I have more than once overstepped the mark and diagnosed malignant disease or tubercle of the cecum when the disease was inflammatory and originated in the appendix. Both malignant disease and tubercle may exactly mimic appendicitis, but it should give rise to suspicion when in a middle-aged person mild attacks are associated with the presence of a very definite hard lump; if a well-marked lump is found at the outset of an attack; if such a lump gets larger without becoming more tender; if there is evidence of intestinal obstruction, or if there has been much loss of weight. Of course, in any case of a suspicious mass in this neighborhood an operation for its elucidation and treatment should not be delayed. I have elsewhere drawn attention to the several ways in which malignant bowel growths may simulate appendicitis and they may be briefly summarized as follows:

1. A growth in the cecum may be associated with attacks like appendicitis. These attacks may be due to obstruction or to inflammation of the parts around, and this may go on to the formation of an abscess which may exactly simulate one due to appendicitis.

2. A growth in any part of the large intestine beyond the cecum may get blocked and if there is a competent ileocecal valve the cecum is the first part to feel the stress of the obstruction and at first all the pain is referred to this region. It is only as the attack passes off that the falling distension enables the lump elsewhere to be felt.

3. Primary malignant disease of the appendix may be the cause of the symptoms.

Therapeutics.

Uremia. When uremia develops, showing the failure in compensation of the kidney, venesection is indicated to rapidly eliminate the toxins, followed by an injection of the normal salt solution. When convulsions occur such preparations as caffein, scoparius, digitalis and convallaria are useful. If the heart is well compensated and does not enter into the cause of dropsy, the potassium salts, scilla and sweet spirits of nitre are recommended to aid the function of the kidney. Asthma is frequently a symptom denoting the presence of a toxemia and disappears with the improvement, by eliminants, of the heart and kidney. Sometimes it is necessary to resort to chloral or morphine hypodermically in small doses, or perhaps to venesection. Epistaxis sometimes occurs and indicates the necessity of lowering blood pressure. Diaphoretics are indicated very early in the treatment as promoters of elimination and thus relieving the work of the kidney. They should be employed regularly, depending chiefly on hot water or hot-air baths. As to the medicinal agents as diaphoretics, sweet spirits of nitre and liquor ammonia acetatis are preferable, using pilocarpin in emergency cases. Diuretics are of value only when the compensation of the kidney has failed and the urine is scanty and dropsy present. When indicated by poor heart's action and also to assist the kidney, the author recommends a hypodermic injection of morphine, followed the next morning by a hypodermic injection of pilocarpin. The author states that he has never seen any ill-effects follow the use of morphine when given in this way. The operation for stripping off the capsule of the kidney was not discussed by this writer—*J.A.M.A.*

Surgical Suggestions. A fracture produced by only slight violence should at once raise the suspicion of a malignant growth. In such a case a uniform dark shadow about the bone as seen in the fluoroscope is to be interpreted as a neoplasm rather than as callus, for recent callus is not opaque to the X-rays.

In the treatment of fractures of the forearm no consideration is more important than the avoidance of contractures of the fingers, by the intelligent use of splints and by means of early active and passive movements.

Involuntary urination very often means a distended bladder, and in old men it should at once indicate an examination into the condition of the prostate. Vomiting, too, is often caused by distention of the bladder.

In the presence of anemia or of faintness, without other apparent cause, inquire concerning the passage of black stools. The condition may result from hemorrhages due to an ulcer or neoplasm of the small intestine.

Inflamed areas and abscesses about the knees of creeping infants should be examined for foreign bodies.

An amputation for malignant ulceration should not be performed until the possibility of its being merely a broken-down gumma has been satisfactorily excluded.

Tinnitus aurium, present only in the recumbent posture, is suggestive of aneurism of one of the posterior cerebral vessels.

After circumcision it is important to prevent adhesion of the reflected mucous fold of the prepuce to the corona glandis by the daily passage of a probe about the corona, and by the use of vaseline.

Individuals with bluish sclerotics, and with dark lanugo over the upper part of the back are usually of tuberculosis diathesis; and these signs are not inconsequential in making a diagnosis.

Surgical tuberculosis, no less than pulmonary tuberculosis, calls for the most careful general treatment, post-operative and otherwise.

The temptation should not be yielded to to incise a psoas, hip or other "cold" abscess, except in isolated instances and then only under the most rigid asepsis. The production of a mixed infection means chronic sinus, chronic invalidism and, often, amyloid disease.

Children who complain frequently of pain in the stomach should be examined for evidence of beginning Pott's disease. Such cases treated before the development of curvature usually yield very satisfactory results.

In the early months of pregnancy examinations should be made to determine that there is no retroversion or to treat it if it exists. A retroverted gravid uterus impacted in the curve of the sacrum always aborts.

In typhoid fever spontaneous rupture of the spleen may simulate intestinal perforation.

Before operating for pharyngeal adenoids or hypertrophied tonsils make sure that these are not merely an expression of status lymphaticus. If they are, do not employ an anesthetic. Also determine whether the patient is a hemophiliac. If he is, do not operate at all.

When applying a plaster dressing to the leg always include the foot if the patient is to be confined to bed; otherwise "drop foot" will develop.

In dealing with infections or injuries of the fingers amputation should be a *dernier resort*. This is especially the case with a thumb, the most important of all the fingers.

The painfulness of withdrawing packings that have dried in a wound may be avoided by soaking them with peroxide of hydrogen.

In an acute condition simulating intestinal obstruction, if a large mass can be felt in the abdomen think of omental torsion.

In excising a varicocele under local anesthesia, tie the upper ligature first; the pain of tying the lower ligature will then be abolished.

When operating for empyema thoracis it is a good rule to aspirate again when the pleura is exposed and before it is incised. This may save some embarrassment.

—*American Journal of Surgery.*

Hay Fever.

Prousnitz (*Berliner Klinishe Wochenschrift*) says that without any doubt Dunbar has proven that hay fever is due to the pollen of graminaceæ floating in the air in the hay season. The antitoxine acts by diminishing the toxines, and the results of its use have been excellent.

Hypnotism for Morphine Users, Drunkards, etc.

Berezinski (*Roussky Vratch*) would treat drunkenness, the morphine and tobacco habits by the employment of hypnotism, as there are no drugs which will cure these habits. He advocates sanatoria where these cases can be confined and treated hypnotically. He says hypnotism easily and readily cures the tobacco habit, but there is soon a relapse. In alcoholics twenty to eighty per cent. of cures have been effected.

Society Reports--Notes of Interest.

BRITISH COLUMBIA MEDICAL ASSOCIATION—SYNOPSIS OF SECRETARY'S MINUTES.

The sixth annual meeting of the British Columbia Medical Association was held in O'Brien Hall, Vancouver, Tuesday, July 18, 1905. Meeting opened at 10 a.m., Dr. W. D. Brydone-Jack, President, in the chair. There were present at the meeting forty members of the Association, and about ten visitors, chiefly members of the profession, who had lately been attending the meeting of the American Medical Asociation at Portland. The minutes of the previous meeting were read and adopted.

The following committees were then appointed: Audit Committee, Drs. Pearson, Monro and Lefevre. Papers and Business, Drs. Tunstall, Campbell and Keith. Credentials, Drs. McPhillips, Poole and Pearson. Nominating Committee, Dr. McPhillips, Weld and Pearson.

The following new members were duly elected: Dr. A. Lazelle Anderson, Wm. Stephens, McLellan, A. F. Fuller and C. A. McDermid, all of Vancouver; Dr. C. E. Doherty, of New Westminster.

The President's address was then read, and was much appreciated by all present.

Dr. Tunstall, in the absence of the author, then read a paper on "An Unusual Case of Intestinal Obstruction," by Dr. R. E. McKechnie.

The afternoon session opened at 2.30 p.m., and was fully occupied by the reading and discussion of the following papers: "Infection and Immunity," Dr. C. J. Fagan; "Nevus of the Eyelid," Dr. Glen Campbell; "Bilharzia Hematobia occurring in British Columbia," Dr. R. Eden Walker; "Tuberculosis in New Zealand," by Dr. Wm. Stephens.

At the evening session, 8 p.m., under the head of general business, the following resolution was unanimously carried: "That the British Columbia Medical Association consider that the notification of cases of tuberculosis is advisable, and that the Provincial Government be asked to put the regulations relative to this matter into effect."

The election of officers resulted as follows: President, Dr. Geo. E. Drew, New Westminster; Vice-President, Dr. O. Weld, Vancouver; Treasurer, Dr. J. D. Helmcken, Victoria; Secretary, Dr. R. Eden Walker, New Westminster. Next place of meeting, New Westminster, B.C., date to be left in the hands of the Executive to fix.

Mr. Grant, architect, then was introduced, and with the aid of lantern slides he gave a very interesting description of the construction, etc., of the new city hospital at Vancouver.

Col. Tracey, C.E., next gave an interesting address, also illustrated by lantern slides, on the septic tank system of treating sewage. No further business presenting itself, the meeting adjourned at 10.30 p.m.

On Tuesday afternoon a number of the members with their wives were entertained by an excursion on Burrard Inlet, and on Wednesday afternoon a number of members and ladies visited the Provincial Hospital for the Insane, New Westminster, and were entertained at a garden party by Dr. C. E. Doherty, the medical superintendent, and Miss Doherty. A most enjoyable afternoon was spent.

Phlebosclerosis.

Dr. Chas. F. Martin, of Montreal, at the annual meeting of the Association of American Physicians, read a paper on Phlebosclerosis, in which he stated that cirrhosis of the veins involved most frequently the veins of the lower extremity, the internal and external sapheni, a condition which occurred before thirty-five years of age mostly. In these cases there was an absence of arteriosclerosis, although this is a common affection, easily detected in over 60 per cent. of all cases. In a majority of the cases (14) examined, there were no evidences of inflammation, and Dr. Martin believed the condition functional from strain, exercise, etc.

Intestinal Indigestion.

Dr. George B. Fowler, New York City, at the 6th Annual Meeting of the American Therapeutic Society, stated that in treating this disease he denies his patients rich soups, steak, pork, chicken and turkey from storage houses, white potatoes (fried), sweet wine, cooked oysters, cheese, kidney, liver, and cooked tomatoes. Rice and hominy, he states, do not tend to create fermentation. He denies there is any difference in the digestive qualities between fresh and stale bread.

Physician's Library.

A Text-Book of the Practice of Medicine. By JAMES M. ANDERS, M.D., Ph.D., LL.D., Professor of Medicine and of Clinical Medicine at the Medico-Chirurgical College, Philadelphia. Seventh edition, revised and enlarged. Octavo of 1297 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1905. Cloth, $5.50 net; sheep or half morocco, $6.50 net.

A sale of over 22,000 copies and the attainment of a seventh edition seems sufficient recommendation for any book; in fact, Anders' Practice does not now need any recommendation—it is too well known. As in the former editions, particular attention is bestowed upon inductive diagnosis, differential diagnosis, and treatment. Regarding differential diagnosis, we notice with much satisfaction that the many diagnostic tables of simulating diseases have been retained. The clinical value of these tabulated points of distinction is beyond cavil. Numerous new subjects have been introduced, among which are: Rocky Mountain Spotted Fever, Examination of Patients for Diagnosis of Diseases of the Stomach, Splanchnoptosis, Cammidge's Test for Glycerose in the Urine, and Myasthenia Gravis. Certain other individual affections have been entirely rewritten and important additions have been made to the diseases which prevail principally in tropical and subtropical regions. The seventh edition of Dr. Anders' Practice maintains the reputation of the work as the best practice before the profession to-day.

The Pharmacopia of the United States. Eighth Decennial Revision. By authority of the United States Pharmacopial Convention held at Washington, A.D. 1900. Revised by the Committee of Revision and published by the Board of Trustees. Official from September 1st, 1905. Philadelphia: J. B. Lippincott Company, printers and binders. Agents: P. Blakiston's Son & Company.

This work is an extensive one of 692 pages, and is to United States medicine what the B. P. is to the English and Canadian profession.

A Text-Book of Clinical Diagnosis. By Laboratory Methods. For the use of Students, Practitioners, and Laboratory Workers. By L. Napoleon Boston, A.M., M.D., Associate in Medicine and Director of the Clinical Laboratories at the Medico-Chirurgical College, Philadelphia. Second edition, revised and enlarged. Octavo of 563 pages, with 330 illustrations, including 34 plates, many in colors. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1905. Cloth, $4.00 net; sheep or half morocco, $5.00 net.

It must, inded, be a great gratification to an author when two editions of his work are required in one year. From such a reception it is evident that Dr. Boston's Clinical Diagnosis fills a demand. In this new second edition many new subjects have been added, including Biff's New Hemogelometer, Ficker's Reaction, an illustrated description of the Leishman-Donovan-Bodies, Ravold's Test for Albumin, Cammidge's Test for Glycerine, and Cipollino's Test. The subjects of cystodiagnosis and inoscopy are given more extended consideration, the practical usefulness of these methods having been clearly demonstrated. Throughout the text it has evidently been Dr. Boston's aim to emphasize in progressive steps the various procedures of clinical technic, illustrating such steps whenever possible. An unusual amount of space is given to the consideration of animal parasites, malarial and other blood parasites, skin diseases, transudates and exudates, and the secretions of the eyes and of the ears.

Saunders' Medical Hand-Atlases—Atlas and Epitome of Diseases of the Skin. By Professor Dr. Franz Mracek, of Vienna. Edited, with additions, by Henry W. Stelwagon, M.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Second edition, revised, enlarged, and entirely reset. With 77 colored lithographic plates, 50 half-tone illustrations, and 272 pages of text. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto, 1905. Cloth, $4.00 net.

It is with much pleasure that we review the second edition of Professor Mracek's admirable hand-atlas. That the work is a success and of practical usefulness needs no further proof than the demand for a second edition, not only in America but also in

Germany. The author has added some twenty-six new plates, fifteen of them colored lithographs, and all of exceptional merit. The text he has thoroughly revised to include the most recent dermatologic advances, especially along the line of histopathology. As in the first edition, there is evidence of the conscientious editorial work of Dr. Stelwagon, many additions being interspersed throughout the text.

Manual of Diseases of Children. By James Burnett, M.A., M.B., M.R.C.P. (Edin.), Registrar and Assistant to the Extra-Physicians, Royal Hospital for Sick Children; Senior Clinical Medicine Tutor, Extramural Wards, Royal infirmary, and Physician to the Marshall Street Dispensary, Edinburgh. Edinburgh: E. & S. Livingstone. Price, 6s. 6d.

We have found in an examination of this Manual of Diseases of Children, one that is practical, up-to-date, clearly written, whilst at the same time giving a brief outline of a subject not sufficiently and carefully studied by most practitioners. It is of all things a book that we can recommend to students who will be able to get hold of a good working knowledge of this department of medicine, readily and quickly. To those in the practice of general medicine, who are pushed for time, it will serve as a good guide in all it undertakes to enlighten them upon.

A Text-Book of Diseases of Women. By Barton Cooke Hirst, M.D., Professor of Obstetrics, University of Pennsylvania. Second edition, revised and enlarged. Octavo of 741 pages, with 701 original illustrations, many in colors. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street. Toronto. 1905. Cloth, $5.00 net; sheep or half morocco, $6.00 net.

Dr. Hirst may well be congratulated upon the publication of such a work as this, a second edition of which has just appeared. Written on the same lines as his "Text-Book of Obstetrics," to which it may be called a companion volume, it gives every promise of attaining a similar success. The palliative treatment of diseases of women and such curative treatment as can be carried out by the general practitioner have been given special attention, enabling physicians to treat many of their patients

without referring them to a specialist. Indeed, throughout the book great stress has been laid upon diagnosis and treatment, and the section devoted to a detailed description of modern gynecic operations is without doubt the most clear and concise we have yet read. In this second edition the revision has been thorough, introducing, however, only such matter that promises or has been demonstrated to be of permanent value. Forty-seven new illustrations have been added and thirty of the old ones replaced, the work now containing a collection of seven hundred and one beautiful original illustrations, many of them in colors. We take much pleasure in recommending Dr. Hirst's work to the medical profession generally.

Hand-Book of Physiology. For Students and Practitioners of Medicine. By AUSTIN FLINT, M.D., LL.D., Professor of Physiology in the Cornell University Medical College; Consuting Physician to the Bellevue Hospital, New York, etc. With 247 illustrations in the text—including four in colors—and an atlas of sixteen colored plates, including forty-eight original figures, taken from actual stained microscopical preparations. New York: The Macmillan Company. Price, $5.00.

Dr. Austin Flint has been actively engaged in teaching physiology to medical students since 1858, during which time he has always been well abreast of the advances in this branch of medicine. The present volume represents the instruction in physiology which he now gives in Cornell University Medical College, but it has been to some degree expanded so as to permit of extended study and reference. We are glad to see that the book eliminates the metric system as we have no use for it. As a student's handbook it is the equal of any; as a work of reference for busy practitioners, there is none better.

Memoirs of a Great Detective. Incidents in the Life of John Wilson Murray, Chief of the Detective Department of the Provincial Government of Ontario. Compiled by MR. VICTOR SPEER. Toronto: Fleming H. Revell, Richmond Street West. Price, $1.50.

Nearly every doctor in Ontario, if not in Canada, has during the course of his medical career, been called into court, some-

times as an expert, sometimes as an ordinary witness; sometimes in medico-legal, sometimes in civil cases. Some of these cases are historic, and at the time excited the greatest interest from medical men as well as others. Many of them are yet vividly stamped upon the memory of those of us who have read the newspapers for the past thirty years. The thought to compile, therefore, the incidents of these cases of one who was largely and in nearly all of them instrumental in working them successfully out, was a happy one, as Mr. Speer has given us a volume of truth far more attractive than the ordinary fiction. The book is intensely absorbing, written in a smooth style of diction, and records the lifework of a man who has done his level best on behalf of law and order in the Province of Ontario. It is as infinitely interesting to the medical fraternity as it will be to the lay public, and is another evidence of that trite saying, "Truth is stranger than fiction."

Abdominal Operations. By B. G. A. MOYNIHAN, M.S. (London), F.R.C.S., Senior Assistant Surgeon to Leeds General Infirmary, England. Octavo of 695 pages, with 250 original illustrations. Philadelphia and London: W. B. Saunders & Company. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. 1905. Cloth, $7.00 net.

It has been truly said of Mr. Moynihan that in describing details of operations he is at his best. This, his latest work, therefore, will be widely welcomed by the medical profession generally, giving as it does in most clear and exact language the prelimiary technic of preparation and sterilization, as well as the actual *modus operandi* of the various abdominal operations. Mr. Moynihan's reputation in this field is international, and this work, stamped with the authority of a rare experience, is undoubtedly to become the recognized standard. Peritonitis and appendicitis, the latter of such present importance, have been accorded unusual space in a work of this kind; and the subject of chronic gastric ulcers is also excellently detailed. Throughout the entire book numerous cases have been quoted from both the author's own practice and those of other distinguished surgeons. The beautiful illustrations are all new and have been drawn especially for Mr. Moynihan's work under his personal supervision. The book is a valuable production and adds greatly to the reputation of its eminent author.

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ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure blackmailing.

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COMMENT FROM MONTH TO MONTH.

Dr. R. A. Reeve, Dean of the Medical Faculty of the University of Toronto, has been elected by his confreres of the Local Branch of the British Medical Association, to the office of President of that august body for 1906. The choice is a happy and in every way a satisfactory one. Ever kind, always courteous, a model man to fashion deportment by, Dr. Reeve will bring to the office all the requisites of a popular presiding officer; and under his wise, earnest, pacific administration, the annual meeting in Toronto next year will be assured a pronounced success. In every way his hands will be supported loyally, and it is safe to say the working out of the details of arrangement for the reception of visitors and their entertainment, will be carried along with vim and enthusiasm, when all know that a gentleman of the finest calibre commands. Every officer elected, as well as every one not an officer, will feel it incumbent upon him that the occasion will demand something of him, and each and every one will be sure to contribute something towards the success of the meeting in whatever way he may be called upon to contribute.

The other day in the Toronto Police Court the presiding magistrate in hearing a case for the collection of wages due, stated every man was entitled to what he earned. The thought or statement, which is only a rational and equitable one, should be wafted into that court where once in a while a physician is called upon to sue a delinquent debtor, so that the wisdom of the remark might permeate through and through the presiding officer therein. It is well known that physicians do a great deal of work for which they are never paid; and that now and again, where just claims are prosecuted, they are not always successful. The practice of medicine is a profession wherein its members dare not seek for work in the open market. Physicians cannot prosecute a commercial business nor ply a trade, and in all cases their services are asked for, and consequently should be recompensed accordingly. So patent is this that there is absolutely no exception to the rule that the services of all physicians are engaged by their patients, and so long as such patients keep the engagement intact of their own accord, these selfsame services should be paid for accordingly. It seems too bad, then, when a physician does take action in a court of law that his action is not always sustained. There can be no other moral law than the right to every dollar that every man earns regardless of what trade or profession he belongs to, and people who engage a physician should be made to pay that physician when required to.

The *Toronto Globe* recently delivered itself of a very commendable article on the good physician, particularly as he has been known for a great many years in Toronto East. The occasion was one which led to some very fine sentiments from the pen of the editor of one of the foremost newspapers on this continent. No one in the medical profession can quarrel with these sentiments, although it is a well-known fact amongst the members of this profession that a great deal of humanitarian work is done annually wherever a physician breathes the breath of life. We are not flashing this from any tower. All we wish to do is to say that the medical profession will appreciate this testimonial that its aims are not all harsh, nor mencenary. We believe, however, that there is a great deal of misplaced charity, and our inability often to separate the chaff from the wheat militates against the profession of medicine financially. In general the public does not appreciate this. They think that there it not much difference in treating a poor man who is not able to pay for nothing, and another man who is able to pay for the same

service. If, they say, my doctor treats John Jones, who is a poor man, for nothing, why should I pay, when I am only a little better off in this world's goods than John Jones, and so on and forever. In fact, the financial part of the practice of medicine has resolved itself into this, that if a patient does not choose to pay his doctor in a year or two the account is overlooked, and the doctor goes on his way looking for pastures new and green. There is no question then that we are doing ourselves and our families a great injustice. If it remained at that, all might be well and good; we would not be doing any injustice to our neighbors. But is this so? When a doctor arrives at that time in the practice of medicine when he can afford to allow the financial end of his profession to drift or look after itself; when he takes what he gets from patients and never asks them for any more, we would like to ask is he dealing righteously and honestly by his brother practitioner who is often young, and often requires the money. This very point will sooner or later call for a revision of ethics, because the past order of things is passing away, and a new order with some commercial sentiment incorporated is approaching.

Most people have a very crude understanding of the ways and purposes of hospitals, and if the medical profession ever undertakes to enlighten them concerning them, the latter generally get fibrillary twitchings. There is a certain proportion of the community which believes that the word hospital means free bed, free board, free room rent, and above all free medicine and free doctor's attendance. It is sometimes necessary, though sad and painful, to enlighten these people. Of all things connected with the word hospital, the most fixed delusion is that you can get accommodation—or ought to get accommodation—in these institutions, a bed to yourself, a whole ward to yourself, with a nurse or two thrown in—and especially and most important of all—your doctor's attendance for the rate you pay to the hospital per week. It is remarkable that intelligent men, and the more intelligent they are, the worse they are, in all walks of life, in law, in religion, in education, in agriculture, are full of the idea that to go to the hospital means that you do not have to pay the doctor who attends you in such institution. In their poor benighted bosoms they have the idea that the hospital pays the doctor or, at least, he gets his fee from the government, but they never mention upon which government the poor doctor is to graft. Why should doctors, then, treat the paupers of any com-

munity or municipality, when such ideas are grounded in the feelings of that community? They evidently believe that it is morally right for the doctor to be paid for his trouble by the hospital or the government. Such being the case should not every municipality pay for the treatment of its own indigent sick?

The patent medicine industry in the United States these days is getting some pretty hard knocks. High class periodicals in New York and Philadelphia refuse their advertisements, and are not content with so doing. They ceaselessly wage a war upon the nefarious and dangerous trade in nostrums. But by far the greatest blow yet struck, a veritable solar plexus punch, is that just dealt by the Internal Revenue Department of the United States Government. This department has sent out official notices that on and after December 1st, 1905, all patent medicines containing a considerable proportion of alcohol—and most of them do—will be classed as spirituous liquors, and will be subject to the rules and regulations applicable to spirits under the Internal Revenue laws. Under the new regulations it will be impossible to obtain these preparations from dealers, as the sale of spirituous liquors are not permitted. Canada cannot too soon follow suit.

News Items.

THERE were 2,200 deaths in Ontario during August.

DR. KANE, of Gananoque, has located in Sturgeon Falls.

DR. ROBERT AGNEW, of Clinton, has left for Innisfail, Alta.

THERE were 497 births in Toronto in September and 309 deaths.

DR. LAPTHORN SMITH, Montreal, has returned from a trip to England.

THERE were forty-two cases of typhoid fever in Toronto in September.

SINCE the beginning of 1905 there have been 275 births in Kingston, Ont., and 286 deaths.

DR. RIDDELL, Crystal City, Man., and formerly medical health officer of Manitoba, is dead.

THERE were eight marriages in the Yukon in August and five deaths.

DR. E. PELLITIER, Montreal, is attending the International Conference on Tuberculosis at Paris.

DR. GEO. A. SCHMIDT, of Stratford, is now practicing in the C.P.R. hospital at Copper Cliff, Ont.

THE death is announced of Dr. Louis J. A. Simard, one of the leading physicians of Quebec City.

DR. MCEACHREN, who formerly practised in Elmvale, has finally decided to settle in Calgary, N.W.T.

DR. E. C. HANNA, of Thorold, has been appointed house surgeon at the Western Hospital, Toronto.

DR. C. R. MOXLEY, of Kingston, is now associated with Dr. E. Richardson and will be located at Markstay.

DR. S. F. MILLEN, left Cottam for New Liskeard, in New Ontario, where he will practice under Dr. Field.

DR. J. ALEX. HUTCHISON, Montreal, has been appointed chief surgeon to the Grand Trunk Pacific Railway.

DR. P. J. MCCUE, son of James McCue, of Melancthon, is now practicing his profession at Nairn Centre, Ont.

DR. K. D. PANTON, of Milton, left last month for Portland, Oregon. He intends to practice in an Oregon town.

DR. CAMPBELL is to be a resident of Brooklin, Ont. He intends having a drug store as well as his medical office.

DR. E. L. ROBERTS, of Langton, has formed a partnership with Dr. Bowlby, of Simcoe, and is now practicing there.

DURING the past four months in Toronto the Victorian Order of Nurses has made 2,210 visits, 196 being all-night visits.

FOR the first nine months of 1905 Toronto paid for 181 patients in her hospitals, as against 151 for the same period during 1904.

THE Toronto General Hospital and the Hospital for Sick Children have changed the hours of outdoor clinics from 1.30 p.m. to 9 a.m.

PREMATURE births in Montreal in 1904: Legitimate, 229; illegitimate, 49. Still births: legitimate, 425; illegitimate, 54. In the foundling hospitals the number was 494, making a grand total of 1,237.

Dr. D. N. Campbell, who went to British Columbia about two years ago, has returned to Niagara Falls, and will practice there.

Dr. William Gardner, Montreal, has been elected second vice-president of the College of Physicians and Surgeons of Quebec.

A new hospital has been opened at Caughnawaga, the Indian village near Montreal, which will accommodate forty persons.

Subscriptions are being received in Hamilton, Ont., for the purposes of a consumption sanitarium; $20,000 has already been subscribed.

Dr. Bruce White, Millbrook, has been appointed ship's surgeon for the C.P.R.'s steamer running between Vancouver and Hong Kong.

A Provincial medical association is being formed in Saskatchewan. Dr. G. A. Charlton, of Regina, is the provisional secretary-treasurer.

Dr. J. Wilbert Brien, who has been associated with his uncle, Dr. J. W. Brien, of Essex, the past couple of years, will locate in Windsor.

The death is announced of Dr. John M. Purcell, of Halifax, at the age of forty. He had been assistant city medical health officer for several years.

There were 229 deaths in Winnipeg during the month of September; the births were 181. Thirty-seven of the deaths were caused by typhoid fever.

The College of Physicians and Surgeons of Quebec have decided to petition the legislature to establish the five-year course of medicine in that province.

Dr. W. H. F. Addison, one of the house staff of the Toronto General Hospital, has been appointed lecturer in histology in the University of Pennsylvania.

Dr. C. A. Hodgetts, secretary of the Ontario Board of Health, has returned from Boston, where he attended the annual meeting of the American Public Health Association.

Dr. J. Stuart Pritchard, who graduated in medicine this summer, is now located at Doncaster, York county, as physician in charge of the James Bay Railway construction hospital.

Dr. F. J. Weidenhammer, B.A., of Elmira, has returned from Chicago, where he spent the last two months, taking a post-graduate course in surgery at the Rush Medical College.

The Toronto Board of Health is having Dr. Sheard, the medical health officer, consider the advisability of applying for legislation to compel physicians or other authorities to report all cases of tuberculosis.

The Toronto Clinical Society opened for the season on the evening of the 4th of October in the Ontario Medical Library Building, when Dr. Adam H. Wright delivered the annual presidential address.

The Toronto Medical Society opened for the season on the evening of the 5th of October. Dr. Ralph Hooper delivered the presidential address and Dr. Matthew D. Mann, Buffalo, contributed a paper on Obstetrics.

Dr. Walter McMurtry, of Port Hope, honor graduate of McGill University, has gone to London, England, where he will study for a year. We extend congratulations to our young friend on his success at the University.

There were 356 patients treated in the Winnipeg General Hospital during the week ending Sept. 30th, of which number 246 were men, 75 women and 35 children. In the outdoor departments the number treated amounted to 85.

Mr. Hebert M. Little, head of the Department of Obstetrics in the Johns Hopkins Hospital, of Baltimore, has accepted the appointment of superintendent of the Montreal Maternity Hospital. Dr. Little is son of Lieut.-Col. Little of London.

Dr. R. M. Cumberland, who has been assisting Dr. Harper, of Alliston, for several months, left last week for Maple Creek, Assinaboia, where he will probably practice his profession. Dr. Cumberland is a son of Mr. W. B. Cumberland, of Rosemont.

Dr. Bruce L. Riordan, surgeon to the Grand Trunk Railway at Toronto, has been appointed division surgeon with jurisdiction over the middle, northern and southern divisions. Dr. Riordan, who has been in the Grand Trunk service since 1882, will continue on at his present duties of district medical officer.

The following generous donations to the Toronto General Hospital have recently been announced: Hon. Senator Cox, $100,000; Mr. T. Eaton, $50,000; Mr. J. W. Flavelle, Mr. E. B. Osler, M.P., and Mr. E. R. Wood, each $25,000; Mr. H. D. Warren, Mr. P. C. Larkin and Mr. R. E. Walker, each $10,000.

THE Medical Faculty of Toronto University opened for the session, 1905-1906, on the evening of the 3rd of October, when Dr. Victor C. Vaughan, Dean of the Medical Faculty of the University of Michigan, delivered the opening address. Dean Reeve, in making a short address to the students, stated that there were then registered in the first year in medicine, 145 students, and that the total number on that date was 550.

MONTREAL has a new Maternity Hospital. This hospital was established in 1848, for the purpose of giving practical instruction to the medical students of McGill University, and an early by-law of the institution required that the professor of obstetrics in McGill should be the physician in charge of the hospital. Last year the institution attended to over 400 patients, 110 of these being from points outside of Monreal. Two-thirds of the women who attended were married.

THE TORONTO WESTERN HOSPITAL.—The Board of Governors of the Toronto Western Hospital have much pleasure in making the following announcement to the medical profession:

1. All the beds in the hospital, except such as may be required for city-rate patients, are at the disposal of all medical practitioners in good standing.

2. A new building has just been completed for male and female semi-private patients, at the rate of $7.00 per week. This building is entirely separate from all others.

3. Another new building, in a separate portion of the grounds and completely isolated, is ready for the reception of obstetric cases. The prices will range from $10 to $25 per week. The rooms are all private.

4. The contract has been let for another handsome new building for private ward patients. This building will be completed and ready for occupation by the end of the present year.

The Toronto Western Hospital has always treated the medical profession in a generous spirit, and is happy to be in a position to make the above statements regarding its additional accommodation. The governors would esteem it a favor if you would visit the hospital and acquaint yourself with its facilities to care for your patients, both medical and surgical, under your own professional attendance.

During the past year extensive alterations and additions have been made to the Toronto Western Hospital, which will be continued for several years to come, until the Western Hospital will be one of the most modern and best equipped in the city.

The latest addition is a large building in the rear of the main

building which will ultimately be used for a laundry, but is now being used for semi-private wards. A maternity home has also been purchased, and is now open.

The new building, which will be used for a hospital for some time, will accommodate sixteen patients. The basement is now being used for a laundry, and when the further additions are erected the whole building will be used as a laundry. The basement will be the wash-room, the first floor the ironing-room, and the second floor the domestics' apartments.

The maternity home was formerly two private houses, which were purchased and made into one building with twenty-eight private wards. Both annexes are now tenanted.

Work will commence almost immediately on a new building to cost $10,000, for the treatment of infectious diseases. All the rooms in this building will be separate from each other, and will accommodate thirty-five patients.

Early next summer work will commence on another new wing, to cost about $30,000, and will serve as part of the hospital proper until the whole new hospital is completed. The building will then be used as a home for the nurses. As the main building of the hospital is yet in excellent condition, no alterations will be made in it for three or four years, and by that time five new buildings will be erected and will form the main building of the hospital. The buildings will then stretch from one end of the grounds to the other, but the lawn will not be despoiled.

The present tent system will not be abolished, but will be added to as well as the other portions of the hospital, as much good work is being done there.

When all these alterations and additions are completed, in about ten years' time, the different groups of buildings, all erected of red brick, and excellently finished, will cover a frontage of 450 feet on Bathurst Street and 100 feet depth.

Special Selection.

IRON THERAPY, WITH REPORT OF CASES.

W. C. Willits, M.D., Kansas City, Mo.

While volumes have been written on chalybeate therapy and there has been much controversy upon the absorbability of different forms of iron, much that has been written is purely theoretical. It is from the practical demonstration of things that we get the surest and safest information. It has been repeatedly demonstrated that the tincture of the chloride of iron constipates our patients and in many other ways is an undesirable agent as a routine practice; although if these undesirable after-effects could be eliminated, the therapeutic effects of the tincture are reasonably satisfactory. Many organic preparations have been upon the market, and, without any desire to underrate the efficiency of any product, we desire to cite a few cases showing that in our hands Pepto-Mangan (Gude) has almost invariably proved to be all that could be desired in treating secondary anemia. A very important point in selecting a remedy is to choose one which will not produce after-effects more serious than the original trouble, and by reference to the cases cited, it will be seen that in some of them iron in any form would seem to be contraindicated on account of the great constipation. In none of the cases were there any bad after-effects. These cases are taken from those occurring in a general practice and are not selected with any special reference to this remedy.

Pepto-Mangan is palatable, it is easily absorbed, in no case was there any injury to the teeth, it did not produce nausea; and constipation was not produced in a single case. While these few cases might not in themselves be sufficient upon which to base an opinion as to the value of Pepto-Mangan in secondary anemia, yet much valuable information can be gained by physicians reporting their successes and failures. However, after having used it quite extensively, I am convinced that it is a reliable blood remedy to use in general practice.

Case 1.—A boy, age 8. His father died of pulmonary tuberculosis; otherwise his family history was good. Two years ago he began to get sick at the stomach in the morning and vomited. He was sleepless and coughed considerably. Temperature, 99.5 deg.; ankles were slightly edematous. Upon

examination it developed that he had a heart murmur systolic in time, but not transmitted. His blood examination showed 3,500,000 red cells, hemoglobin, 50 per cent. There were no physical signs of lung consolidation. No tubercular bacilli found in the sputum. The patient was placed in bed, and a nutritious diet ordered. He was also given Pepto-Mangan (Gude), a teaspoonful four times a day. In a very few days his symptoms began to improve. Although he was nauseated and vomited frequently when I first saw him, this trouble was not increased by the medicine and in a very few days his nausea stopped and did not return. At the end of ten days the heart murmur could not be heard. His color cleared up and he is now well, to all outward appearances. A second blood count was not made, but from his appearance it is evident that the hemoglobin is near the normal.

Case 2.—Miss M., age 19. Family history negative, except that one brother died of pulmonary tuberculosis at 22 years of age. She had been healthy until December, 1903, when she caught cold and coughed considerably. She was relieved of the cold, but the cough continued. Expectorates considerably. Normal weight, 105 pounds; now weighs 97 pounds. Temperature is usually normal, but things she has some fever in the evenings, but not every evening. Two or three times she sweat at night, but has not done so regularly. Never expectorated any blood. Is restless at night. Appetite poor; constipated; looks very anemic. Pulse, 90 lying down, 96 sitting, and 100 standing. No signs of consolidation or cavities in the lungs. There are a few rales present, but the expiratory effort is normal. Has a chest expansion of two and a half inches. Blood count showed red cells, 3,040,000; white cells, 4,600; hemoglobin, 60 per cent. While this looked some like tuberculosis, the sputum, on repeated examination, showed no bacilli. She was told to stay in the open air as much as possible, sleep with the windows open, and eat plenty of good nutritious food. She was also placed upon tablespoonful doses of Pepto-Mangan (Gude) four times a day, with marvelous results. In five weeks her blood count showed red cells, 4,200,000; hemoglobin, 85 per cent. The general symptoms were greatly improved. She went west, but has continued the treatment and an occasional letter informs me that she is now absolutely well, and has greatly increased in weight.

Case 3.—Mrs. S., age 35, married. Has had four children in six years. She complained of headache, backache, and constipation. Was very much run down. Since her menstrual flow had been established after her last child, she has been suffering considerably at her monthly periods. The flow was scant and

only lasted a day or two, whereas in the past she had flowed four and five days. Her mental and nervous symptoms were very bad. Upon several occasions she nearly collapsed mentally. She had anesthesia and hyperesthesis; her memory was very poor, making it altogether a very pitiable case. She was advised to take to her bed. Was later given graduated exercise and placed on tablespoonful doses of Pepto-Mangan (Gude) four times a day. There was at no time any ill effects of the medicine noticed. Her progress was slow, but she gained in weight, her menstrual flow became normal and her nervous and mental symptoms vanished, and her color became much better. While the rest and the exercise must be given some credit in this case, we are inclined to give Pepto-Mangan the greatest amount of consideration in relieving the symptoms.

Case 4.—Miss C., aged 14. Family history negative. Suffering with chorea. She was placed on Fowler's solution and Blaud's pills. Improvement began soon, but owing to the constipating effects of the Blaud's pills, Pepto-Mangan (Gude) was used instead. The improvement was more rapid and she was not troubled with the constipation afterward. This case is briefly cited to show the advantage of Pepto-Mangan over Blaud's pills.

Case 5.—Miss C., aged 20. Came for examination. The history showed that she had been treated for several different conditions by various physicians, but her chief difficulty was that she would fall asleep at any time of the day or night. There were no premonitory symptoms, but she would be sitting talking to a person and would go to sleep. As soon as she would wake up she would be normal again. At night she would sleep all night, but would toss about the bed, talk and laugh in her sleep, but wake in the morning not knowing that she had done any of these things. She was easily irritated, and her memory was very poor. She had been suffering in this way since she was 12 or 13 years old. Her menstrual flow was very irregular, sometimes missing two or three months. Her blood showed hemoglobin, 65 per cent.; red cells, 3,600,000; white cells, 4,000. She was given advice as to diet, exercise, rest, etc., and placed on Fowler's solution and Pepto-Mangan (Gude), the latter one tablespoonful four times a day. Her progress was very slow indeed. At the end of six months her blood showed hemoglobin, 90 per cent.; red cells, 4,500,000; white cells, 4,000. She did not sleep nearly as much, her menstrual flow was regular, and she slept more quietly at night. However, she was not entirely well. She left the city and I lost sight of her.—The Kansas City *Medical Index-Lancet.*

Dominion Medical Monthly

And Ontario Medical Journal

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Original Articles.

PRESIDENT'S ADDRESS.*

By John Stewart, M.B., Halifax, N.S.

Friends and Colleagues,—My first duty is to thank you for the honor you have conferred upon me in electing me to preside over this meeting.

I can assure you that my pride in this great honor is tempered by a feeling of very great responsibility and a sense of marked inaptitude for the duties of this position. And in thanking this Association for an undeserved honor, I wish to thank, especially, the most earnest, energetic and cheerfully laborious Executive which any President ever had.

I wish to express my sense of obligation for the presence of His Honor the Lieutenant-Governor, whose more than eighty years of strenuous and honorable life give exceptional value to the kind words of appreciation in which he has just welcomed our Association to this city.

Permit me also to express my pleasure in having on the platform my dear old friend and colleague, the Honorable D. McN. Parker, one of the founders of this Association.

And now I bid you welcome, welcome to this picturesque province of Nova Scotia and to the city of Halifax.

*Delivered before Canadian Medical Association, Halifax, August, 1905.

I bid you welcome on behalf of the medical men of this province; for when it became known that the Canadian Medical Association was to meet here, there came in from all over the province, from the county societies and from individual practitioners, expressions of a desire to have a share in your entertainment, and therefore it is that we are here to-day as the guests of the Medical Society of Nova Scotia, and that we have listened to the warm welcome of its President.

In welcoming you to this place I should perhaps say a few words of introduction to a city and a province new, perhaps, to many of you. If you are interested in history you will find much here to occupy your attention.

In the early morning mists of our history we see Leif Ericson in his Viking galleys steer along our coast. Four hundred years ago the Cabots took possession of these regions for King Henry VII. And then for two hundred years the intrepid navigators of old France, De Monts, Champlain, St. Denis, LaTour, explored these bays and headlands.

If you can spare time to visit Annapolis you will find traces of the French occupation, and see still in good preservation the old powder magazine, the oldest European masonry in America north of Mexico, and built of stone brought from France. Midway in the province, you come to Grand Pre, with its crowded memories of the past, and its wide acres of fertile dyke lands, which we owe to the industry of the early French settlers. And in the extreme east you will find the historic ruins of Louisburg, where the sea birds cry over the rain-swept turf which covers many a gallant heart. Nova Scotia may indeed claim its share in thrilling memories of "old, unhappy, far-off things and battles long ago."

We can point with pride to the distinguished names of many Nova Scotians. I shall avoid the troubled waters of political life and will mention only the fact that two of the most distinguished college presidents in this country were Nova Scotians, viz., Sir J. W. Dawson, of McGill, and Rev. G. M. Grant, of Queen's. In literature we are proud of the reputation of Haliburton The hero of Kars and the defender of Lucknow were both Nova Scotians. Our shipbuilders and our sailors have carried our name round the world, and it is safe to say that there are few ports in the world where you may not find a Nova Scotian sea captain.

This city of Halifax is crowded with historic memories. It was up this harbor that the ill-fated squadron of D'Anville, shattered and storm-tossed, came to anchor, to meet a more

deadly foe than wind and wave in the pestilence which destroyed hundreds of brave soldiers. It was here that Cornwallis, stout soldier and sagacious statesman, arrived in 1749 and laid the foundations of this city. St. Paul's Church, built in 1750, is the oldest Protestant church in the Dominion of Canada, and the old churchyard of St Paul's is one of the most interesting cemeteries in this country. In it were laid side by side the heroic dead who made the names of the *Shannon* and the *Chesapeake* famous.

In the old provincial building, where we hope to meet this evening, Mr. Lawrence Kavanagh stood in 1827, the first Roman Catholic member since the Reformation to represent a constituency in British dominions.

And there is another old building here, which to my mind should be full of interest for all Canadians. It was a Nova Scotian, Sir Samuel Cunard, who had the enterprise to start the first line of transatlantic steamships, and there are men in Halifax to-day who remember when the *Britannia*, the first Cunarder, came up the harbor and to the shipping office of S. Cunard & Co.

And may I draw your attention to our geographical position, and to our incomparable harbor It has the largest dry dock on this side of the Atlantic; it is defended by one of the most powerful fortresses in the world, and at any hour of day or night, summer or winter, in any state of the tide, the largest and swiftest ships afloat may come alongside the pier, or leave it punctually, without delay or interruption

I trust that when this Association meets next in Halifax it will find the western terminus of the fast Atlantic service safe in the keeping of the " Warden of the Honor of the North."

Finally, bear with me if I point to our educational institutions. Dalhousie University, the only undenominational college in the province, has not only supplied professors to several universities in the United States, but furnished a distinguished successor to the renowned Tait of Edinburgh, and only the other day, sent one to the University of Birmingham. We have also a medical college whose graduates are now dotted all over the Dominion and the United States, reflecting credit on their province and their Alma Mater. There is the Institution for the Deaf and Dumb, where results are obtained equal to those of any similar institution anywhere; and finally we have this School for the Blind in the hall of which we are met, which is presided over by Dr. Fraser, a gentleman second to none on this continent in the skill and success of his methods, and whose marvellous per-

sonality overcomes all disabilities and inspires all who come in contact with him.

This is not the first occasion on which the Association has met in Halifax.

In 1875 the Association first met here, and again in 1881, when the General Secretary was a young Montreal physician, whose name is now a master word in the schools of Esculapius the world over—the Regius Professor of Medicine in Oxford. At the meeting of 1881 the attendance was 53; to-day we have already registered over 200.

It is only fitting that I make reference to some of those who were with us then and who to-day are not. The President was Dr. G. E. Fenwick, of Montreal, a distinguished surgeon, who occupied the chair of Surgery in the University of McGill for fifteen years. The Vice-President for Nova Scotia was the late Dr. R. S. Black, one of the leading physicians of Halifax for many years, a man of wide culture, and especially familiar with Spanish history and literature.

There are two names to which I wish particularly to refer in this place on account of their connection with this province and their interest in this Association. The late Dr. Edward Farrell was one of the foremost citizens of Halifax, and took a leading part in our political life, having been a member of our Legislature. He was one of the founders of the Halifax Medical College, where he held the chair of Surgery from its foundation until the time of his death, and his admirably lucid, well-ordered and emphatic style made him one of the best lecturers whom I have ever heard. He was surgeon to the Victoria General Hospital for thirty years. He took a keen interest in the subject of tuberculosis, especially in the organization of methods to prevent the dissemination of the disease, and was appointed by the Dominion Government to represent us at the Congress on Tuberculosis in Berlin. And it was in the discharge of his duty as a member of a commission appointed by our own local Government, to select a site for a sanitarium, that he contracted his fatal illness, through exposure to cold and wet when driving in the country; and on the first day of this new century he passed away from among us, but the brave and cheerful spirit, the ready wit, the warm, kind heart are memories that remain.

And what can I say of Dr. Wm. Scott Muir? I may say, I believe, that no member of this Association was better loved or more heartily welcomed to its meetings. He had been a Vice-President, and upon at least one occasion he was nominated for the Presidentship, but generously insisted on giving way to

others. He was a very regular attendant at our meetings, and his stalwart figure and cheery voice had become familiar to the profession throughout Canada. His business ability and his knowledge of affairs made him invaluable in committees, and his contributions to the scientific work of the Association were marked by keen observation and practical common-sense. He was my own dear friend, and I shall not trust myself to say more of what his loss has been to us.

And so one by one, just as we learned to value them more, our comrades fall, and what can we say but

> Fare you well :
> Hereafter, in a better world than this,
> I shall desire more love and knowledge of you."

It is perhaps a weighty sense of the responsible position in which you have placed me that gives to my thoughts to-day a somewhat serious turn.

I look upon this great assembly, I think of the years of study, the expensive education, the physical and intellectual toil, the laborious days and anxious nights, and when I consider the results I am tempted to ask—what is the good of it all? We toil to save, and how often it is that the valuable lives, the bread-winners, the wise, the strong, the true, are taken, and we succeed in saving the idle, the dissolute, the degenerate. There is only a sense of futility, there is horror in the thought that our art may in unworthy hands be degraded to be a servant of evil passions.

And have all these then—our brothers and our forebears—died in vain? Have their lives been wasted, and would it have been better had they had no part in aught that's done beneath the circuit of the sun?

Perish such thought! These dark imaginings are nothing but rank pessimism, and pessimism is fatal to us of all men. Of all men the medical man must be an optimist. If our work is to save and prolong life, we must believe that life is something worth having and worth keeping, or we are not true to ourselves, and are false to other men.

Now, what is the value of life ? Character. And what makes life worth having and worth keeping ?

The more we reflect upon human life in all its manifestations, the more we do become convinced that its true criterion is character. To the unthinking it may seem that this subject is outside our province, and that health and character are in different categories. But we cannot dissociate the physical from the intellectual and moral elements of our nature. As anatomists we may study

the physical framework of man, but as practitioners of medicine we must consider the living man as a body, soul and spirit.

Our nature is threefold, and health and character pertain to each component, the Physical, the Intellectual and the Moral. We may admit that so far as we can see, perfect physical health may exist with feeble intelligence and degenerate morals, but the ideal condition for which we should aim is the balanced blend and perfect equilibrium of all these elements. And even though at first glance it may seem that one component may attain perfection, while the others are defective, a close observation convinces us that it is not so. The brilliant intellect is hampered in its working in the diseased body which forms its transient tabernacle; the "eye sublime," subdued to that it works in by a vile spirit, loses its brightness, and

> "Faults in the life breed errors in the brain,
> And these reciprocally those again."

And as Maudsley put it the other day at the British Medical Association, "Mind works in every function of the body; a sound body is the foundation of a sound mind and the lunatic is lunatic to his finger ends." We cannot think soundly about life if we ignore this essential and indissoluble trinity. Experience tells us that in our work of detecting, preventing, eliminating disease, we cannot treat our patient to advantage if we regard only his physical condition and neglect consideration of his mental equipment and moral proclivities. Indeed, the manner of man our patient is, is determined more by those invisible forces than by his corporeal form, or as we have it in the sayings of the Wise Man, "As he *thinketh* in his *heart* so *is* he."

And it is with the community as with the individual: that which makes a nation great is not the wealth of its people, or their intelligence, but their good name. It is because I believe that the medical profession may have a large influence in moulding the spirit of a nation, that I wish in the hour which custom allots to me here, to offer a few remarks on National Character and Public Health.

How may our national character help or hinder us in our work, and how may we, as the guardians of the public health, help to make or mar our national character ?

The public health laws of a country will depend largely on the character of the people. The character of the people will be conditioned largely by their public health, that is, by that standard of health of the individuals composing the nation which, as a

national ideal, all the people are interested in and willing to make sacrifices for. This is Public Health in the largest view.

And first let us consider some of the features of national character which may influence public health.

There is *love of liberty,* and a free people is usually a vigorous and healthy people.

But there is a liberty not according to knowledge. When an individual claims the right to act according to his own judgment in matters of which he is profoundly incapable of judging, his boasted liberty may prove a perilous possession to himself and his neighbors. When a community refuses to be bound by laws which Sanitary Science has declared to be necessary, it abuses its liberty and may bring serious damage upon itself. The laws of health cannot be broken with impunity, and this spurious love of liberty frequently stands in the way of sanitary reform.

We have a striking instance of it at present in the stupid rebellion against sanitary laws shown by many communities on the lower Mississippi in the present epidemic of yellow fever.

From the thought of liberty to that of bondage may seem a strange step, yet the next national characteristic which I mention as having an influence on public health, namely, the worship of material things and the feverish haste to accumulate wealth, lays upon us a bitter and grievous bondage. The public and the representatives of the public are too apt to regard with impatience, if not with scorn, the claims of any interest which does not seem to have immediate or direct bearing on the great national occupation of money making.

There is an epigrammatic expression in the works of Aristotle which might well be inscribed in letters of gold over the council chamber of our legislatures and our boards of trade. It may be freely translated thus, "It is not seemly for a free people to be always seeking for cash returns."

I think the Greek philosopher saw the glitter of the golden manacles and would warn us, if we value freedom, to set our affections on other things than gold.

This national characteristic, disinclination to invest in medical securities, is, perhaps, due to various things. It is partly due to ignorance, to an incapacity of appreciating scientific teaching, to a hesitation in trusting the expert opinion of Science—for which, perhaps, Science herself is somewhat to blame. It is not entirely the fault of avarice. When our people are convinced that any measure is for the public weal, they are generally will-

ing to aid. And I may perhaps draw attention here to the fact that the first public sanitarium for tuberculosis, the first in Canada erected as a Government work, is now in operation in Kentville in this Province.

But, as a rule, there is great difficulty in inducing corporations and municipalities to expend a reasonable sum in carrying out the details of a public health system—to pay the water supply, drainage, sewerage, removal of garbage, disinfection. It is not too much to say that apathy in regard to questions of public health is a national characteristic.

Like the Sybil with her precious scrolls, Hygeia comes to Demos, and Demos will not buy.

And the yearly tale of death and disease preventable by sanitary measures, increases, and perhaps the only effectual clarion to rouse the indifferent will be—as it has been before in the world's history—a pestilence.

Possibly if the public could see the mere financial loss incurred by preventable disease, the loss of time, the inefficiency of workers, the increased rates to maintain the families who have lost the bread-winner, they would be willing to give more to the Health Department.

There is a feature of our public life which I think may fairly be described as a national characteristic, and that is our tolerance if not encouragement of quackery. I mention it here because I wish to point out the great injustice of this to our profession.

The youth who aspires to the practice of medicine is required by the laws of his country to undergo a certain course of study, tedious and expensive. He has to pass certain examinations and give proofs of familiarity with the requirements of his profession. He has to satisfy the authorities as to the integrity of his moral character before he is allowed to begin practice. And now see him, embarking on the practice of his profession. From his window he sees the apothecary's shop, and knows that for one patient who has gone there to have a prescription filled, a dozen go to buy some proprietary medicine. He buys the morning paper and finds one-tenth to one-fifth of the space for which he pays taken up with advertisements of nostrums, often with testimonials signed by otherwise intelligent and moral people. He dines at his club and he hears nothing but the wonderul cures wrought by some itinerant quack who has never fulfilled one requirement of the Medical Act. Truly, Demos loves the quack and seems to have a special spite at him who would practise his

profession scientifically in accordance with the noble spirit of the Hippocratic oath.

There are, indeed, many ways in which the traits of national character may influence the health of the people.

In the Report of the Royal Commission on Physical Deterioration, no evidence seems to me more interesting than that of Mrs. Close. This lady, who has given her life to the study of the domestic conditions among the laboring classes of almost every country in Europe, has no doubt of a deterioration in the physique of the laboring classes in England. And the explanation of this she finds in a diminished sense of duty, a debased ideal of the duties of wife and mother. Love of amusement and the attractions of the theatre interfere with the old-fashioned domestic economy. Houses are untidy. Food is badly cooked. Early rising is a vanished virtue. The children are hurried off to school without proper breakfast, and the husband finds in the public house the comfort he is denied at home. The picture is too true and its replica may be found in every town in Canada.

And now, how may we, in the exercise of our daily calling, contribute to the development and growth of national character?

In the first place, we should accustom ourselves to remember that the body with which we deal is of value only as the tenant and instrument of an indwelling spirit, and that the health of the body is our care simply because its ill-health may hamper the action of the intellectual and moral energy within it.

When we prescribe diet and exercise, let us remember that the luxury and excess and love of ease, which are the most potent factors in disease, injure mind and soul as well as body. Let us press the claims of temperance—that true temperance which walks the golden midway, and turns neither to asceticism nor to indulgence.

In the love of Canadian youth for manly exercise we have a most powerful lever for raising the standard of health and morals.

If we are consulted as to occupation, let us sing the praise of the simple life. Civilization is becoming terribly complex, and it seems on all hands to fungate into luxury. And history points a warning finger to the past. When culture joined hands with luxury, decadence was already at the door.

This is an age of sedentary occupations, and a large proportion of the ills which we are called to treat owe their origin to the exigencies of the sedentary life. It is not a natural life for man.

Will it be thought very much out of place if I say, let us honor the farmer. His is the only natural, the original, and the essential work. There is a moral in the fable of Hercules and Antæus. It was not until Hercules had lifted the giant bodily from the ground and so broke the magic contact that he was overcome, and the prescription for many of the ills of the body and of society to-day is in the cry, "Back to the land!"

I have spoken of occupation as bearing on health and character. There is one other fact in our social life to consider, and that is our amusements. Indeed, among some people this question seems to take precedence of work. Amusement and relaxation are necessary, but to give them so prominent a place in our life as they appear to occupy to-day is a menace to the health of the body which they are meant to secure, to the intellectual powers and to moral character.

Pleasure takes precedence of duty, and complaisant sophistry may even justify this order. To scorn delights and live laborious days is now considered folly. We amble along the primrose path of dalliance and avoid the " asperous way that leadeth to the house of sanity."

It is a delight and a hopeful omen to see an interest taken in athletics, and to know that our country takes such an honorable place in all manly exercises. But for one young man whom you will find on the football field, or plying oar or paddle, you will find many who simply waste their time, their only interest in athletics being the spectacular interest of a match or the dubious financial result of a bet. If we could only influence these young men to take a more heroic, a more manly view of life, we should be doing them and our country a service.

Even in our sports there is room for some earnestness, and it might be well if we took our pleasures, as Froissart says our ancestors did, seriously, and sympathized with the spirit of the old English ballad of Ulysses and the Syren:

" To spend the time luxuriously
Becomes not men of worth.

. . . . . .

" . . . . . suppose there were
Nor honor, nor report,
Yet manliness would scorn to weare
The time in idle sport :
For toyle doth give a better touch
To make us feel our joy :
And ease finds tediousness, as much
As labour yeelds annoy.

. . . . . .

" But natures of the noblest frame
These toyles and dangers please :
And they take comfort in the same,
As much as you in ease :
And with the thought of actions past
Are recreated still,
When pleasure leaves a touch at last,
To show that it was ill."

This was the " great spirit of high desire " of the Elizabethan days.

But in addition to what we do effect in this way in our own generation, we and our ancestors wield a great power in the laws of heredity.

The observation of centuries and the universal experience of every-day life, no less than the laborious and well-planned experiments of science, tell us that the organism of to-day is the resultant of forces acting in the past, and the diversity of operation of these forces is what gives Nature her infinite variety. To us who see every day the working of the inevitable law, which visits the sins of the fathers upon the children and to whom the phenomena of reversion and atavism and variation are constantly present, to us heredity is one of the great powers of Nature. And we believe that by a careful application of scientific principles to the environment, education and occupation of our race, we may and can exercise a beneficial determinant action on generations yet to be, eliminating disease, stimulating and clarifying mental processes, strengthening and purifying moral qualities.

But, enormous and far-reaching as we believe the powers to be of the laws of heredity, we must not allow them to dominate us. They are not the forces of a blind, inexorable Fate. These laws are well ordered in all things. When, in view of the depressing influences of the researches of Lombroso and his school, we feel that we are all smitten, when each scans anxiously his brother's face for stigmata, or fancies himself the bearer of a hallmark of some degeneration, let us remember that not only can we, to some extent at least, control the working of the laws of heredity, but so far as we ourselves are concerned, can bid them defiance.

We may, if we will, say, "Evil, be thou my good," and turn our backs upon our good angel who points us to an honorable ancestry and bids us follow in her path. But, when the angel of the Pit, with mocking leer, that " Man of Hell who calls himself Despayre," bids us throw up our hands, tells us we are the

captives of circumstances bound in millennial chains, tempts us to give up the hopeless struggle, we may, if we will, say, "Stand thou on that side, for on this am I." We must not forget that divine part of us, that mysterious, undefinable, undeniable power for good or evil—the human will.

Thirty years ago a young man lay in the Royal Infirmary in Edinburgh. Fortune had not smiled upon him and now, maimed and crippled for life, that life seemed "Doomed to dumb forgetfulness a prey." But not to despair. The "Star of the unconquered will" rose and stood over the lonely bed of William Ernest Henley, and inspired these lines, the finest assertion of the Free Will I have ever seen:

"Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

"In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

"Beyond this place of wrath and tears
Looms but the Horror of the shade,
And yet the menace of the years
Finds, and shall find me, unafraid.

"It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate:
I am the captain of my soul."

"Sir," said Dr. Samuel Johnson, "the man who has vigor may walk to the East, as well as to the West, if he happen to turn his head that way."

Heredity may condemn us to a life of struggle with bodily weakness and mental incapacity, to "Defects of doubt and taints of blood." It cannot chain the free spirit, and he who can say, "I will, I will not," is still a man.

We, the members of this Association, as practitioners of the Healing Art, are the heirs of a great past. The Masters of Medicine have passed from our world, but their influence survives—their spirits still live.

Nothing is plainer in the study of the lives of the greatest of our predecessors than the influence of great ideals. From the days of the grand pagan whom we call the Father of Medicine,

and whose recognition of the power of spiritual forces is so clearly seen in the oath which he laid upon his successors, to the great authorities of to-day, we can trace the power of faith in the Unseen Universe.

Let me quote from the illustrious Pasteur: "Happy he who carries with him a God—an ideal of beauty, and who obeys him. An ideal of Art, an ideal of Science, an ideal of Patriotism, an ideal of the virtues of the Gospel."

And if we are to have strength for our work, courage and hope to cheer us in our long contest with all these shapes of foul disease, we must bear in mind the supreme importance of high ideals—of life—and of man.

"You touch God," said Novalis, "when you lay your hand upon a human body." The spark of life we tend is a part of the divine, and immortal.

> "The soul that rises with us, our life's star,
> Hath had elsewhere its setting,
> And cometh from afar."

We deal not with Dust and To-day, but with Life and Forever. And when we realize this, our own nature becomes ennobled that it works in and can rise to still greater power.

We who deal perforce so largely with the material and perishable, if we would keep sight of the indestructible and immortal, should cultivate a power of detachment, should rise through the cloudy region of the world, and accustom ourselves to the free air and larger atmosphere of a universe.

As the Healer of the world came from beyond its confines, so we who would help in the healing should be able to rise into the ether, where we can have a proper perspective of Time. We should visit the ethereal region where, with Amiel, we may "Listen to the music of time and the hosannas of the world," or with our own Wordsworth hear "Oftentimes the still, sad music of humanity," and be conscious of

> "A presence that disturbs us with the joy
> Of elevated thoughts: a sense sublime
> Of something far more deeply interfused,
> Whose dwelling is the light of setting suns,
> And the round ocean and the living air,
> And the blue sky, and in the mind of man."

And how may we best acquire this power but by the study of our subject—the philosophic study of man?

What our profession requires to-day, even more than an in-

crease in scientific knowledge, is more of the study which gave character to the great masters of the past, and a realization of the grandeur of the divine possibilities in man. True, we see much of the lower nature, weakness and suffering and sin, but we also see in every soul the capacity of Honor, Courage and Love. Let us rather look on these. "Whatsoever things are true, . . . whatsoever things are pure, . . . whatsoever things are lovely, . . . if there be any virtue, . . . let us think on these things.

THE PHARYNGEAL TONSIL.*

By J. Price-Brown, M.D., Toronto.

The Pharyngeal Tonsil, otherwise called Luschka's Tonsil, is situated in the vault or upper and back part of the naso-pharynx. It lies directly upon the anterior surface of the basillar process of the occipital bone, extending upwards as far as the inferior surface of the Sphenoid. It forms the upper quadrant of the pharyngeal lymphoid ring.

This lymphoid ring bases its name upon the peculiar distribution of the lymphatics as they exist in the throat during fetal and infantile life—the position being that of a circle of lymphatic vessels and glands, placed around the pharyngeal wall, and developing into a series of quadrants—the pharyngeal tonsil above, the two faucial tonsils at the sides, and the lingual tonsil below—all being attached to each other by a slender chain of lymphatic glands.

The pharyngeal tonsil is bounded on either side by the fossa of Rosenmüller and the protuberance of the Eustachian tube. Anteriorly it ends near the orifices of the posterior nares in a more or less distinct ridge, while at the lower end it gradually shades off into the ordinary mucous membrane of the oro-pharynx.

The pharyngeal tonsil is composed of lymphatic adenoid tissue, held together by trabeculæ of connective elements. It contains numerous follicles, is highly vascular and is covered by ciliated and columnar epithelium. The gland is normally present during the years of childhood, though not of large size, and should undergo atrophy between the twelfth and twentieth years. As a continua-

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tion of the pharyngeal tonsil, tubal or Eustachian tonsils sometimes exist. They are merely an extension of similar tissue, involving or surrounding the openings into the Eustachian tubes. Before leaving this part of the subject, it should be mentioned that a depression or crypt of unusual size is sometimes found in the lower central portion of the tonsil, which has a tendency to take on catarrhal symptoms, and which is known as Luschka's bursa.

Adenoids.

The pharyngeal tonsil is very subject to hypertrophy, and when this hypertrophy is serious enough to interfere with normal respiration, it becomes an organic disease, and is known by the distinctive term Adenoids. It was Wilhelm Meyer, of Copenhagen, who first drew attention to the evil effects which this overgrowth produced ; and, at the same time, pointed out to the profession the importance of its removal. Since its discovery this disease has been found in every part of the world, although its most persistent habitat is the north temperate zone.

This hypertrophy, which is merely an immense proliferation of the elementary tissues of the gland, is often very irregular in character. It may occur in perpendicular ridges, separated by deep fissures, or in fringe-like masses overhanging the posterior nares, or in peduncular growths depending from the centre of the vault, or big cushions overhanging the mouths of the Eustachian tubes, or comb-like processes extending down the pharyngeal wall—their true character being discovered either by digital examination or the use of the postrhinal mirror.

The evil effects of this obstruction can scarcely be dwelt upon too forcibly, as it occurs in the vast majority of instances during the formative period of life, while the bones of the head are undergoing the process of ossification, and the cartilages are still soft.

As every medical man knows, the presence of adenoids produces mouth breathing accompanied by a flat or nasal voice ; and the larger the adenoids, the more continuous and complete becomes the oral respiration. Now, what does this mean? Simply that the normal respiratory act through the nose cannot be performed. Ineffective and irregular development of that organ is the result. The bones consolidate unevenly, the nose may assume a pinched appearance, and the nostrils become slit-like from the lack of normal use. The upper jaw is apt to become narrow and protuberant, overhanging the lower one, accompanied by arched palate and retracted upper lip—all being the results in a more or less degree of irregular air pressure, arising from the obstruction to nasal respiration.

Before leaving the nasal condition, the mental effect should for a moment be dwelt upon. During child-life any nasal or post-nasal lesion that seriously interferes with nasal respiration has a depress-

ing effect upon memory, temper and mental development. The condition so produced is called aprosexia, and is manifested in various ways. No matter how the child tries, it is often impossible for him to concentrate his mind upon his studies, and he may read a page repeateely without being able to remember its contents. Irascibility of temper in these cases is of frequent occurrence. And we must remember that three-fourths, nay nine-tenths, of all the cases of absolute mouth breathing in children, arise from the presence of adenoid vegetations—together in many cases with tonsillar enlargements, which Dr. D. J. Gibb Wishart will no doubt refer to more fully.

A few words must now be said upon diseases of the ear produced by the presence of these hypertrophies in the naso-pharynx. An adenoid vault is a catarrhal vault, the whole naso-pharnyx as well as nose become more or less surcharged with muco-serum or muco-pus, that it is impossible for the child to void, and which not infrequently finds an entrance into the middle ear. Frequently, too, adenoid cushions so press upon the Eustachian orifices that the tubal muscles lose their power, the tubes are not expanded for the admission of air and serious ear trouble is the result, awaiting only an attack of scarlet fever, measles, or lacunar tonsillitis, to result in acute otitis media, with prolonged discharge, not infrequently ending in deafness.

The etiology of adenoids I need not dwell upon. It is something we don't know much about, save the fact, that they occur most frequently during early child-life. They may exist at birth and even in middle age, but these conditions are rare. We might talk of lymphatic temperment and constitutional dyscrasias, of climatic influences and insanitary conditions, and a host of other things, as having influence in one way or another in the production of the disease, but we would be little better off at the end than at the beginning. The thing that stares us in the face, although we may not see it, is the fact, that behind the palate there exists a little mass of superabundant tissue, that is endangering the health as well as the mental and physical faculties of our patient, and that the whole physical organism is crying loudly for its removal.

Before deciding to operate, however, it is well to remember that mere enlargement of the gland structure in the naso-pharynx, does not in every instance imply hypertrophy. There may be congestion from temporary causes, as in acute rhinopharyngitis; there may be interference in systematic circulation, as in cyanotic conditions, induced by kidney or liver disease; or reflex action from intestinal irritation, producing turgesence of the post-nasal structures. In these cases, systemic treatment of an appropriate character may relieve the infiltration, and the supposed adenoids may at once disappear.

Some writers divide adenoids into different classes based upon

their density of structure. It seems to me that this is a refinement of distinction that is scarcely necessary. The younger the child the softer and the more cellular the growth and the fewer the connective tissue elements. As years advance these conditions reverse, until, finally, the glandular cell-like mass of the young child becomes the hyperplastic fibrous adenoid of adult life—the condition being one of gradual change, a progressive hardening of tissue.

Treatment.—The only method of treatment worth considering is operative—the direct removal of the offending structure. Of instruments for this purpose there are many. The electro-cautery knife and electro-cautery snare have both been frequently used, but by the best operators they are condemned, and rightly so. Cutting forceps of various kinds, curved so as to enter the naso-pharynx, have had many advocates. It has always seemed to me to be a clumsy and ineffectual instrument; and although I used it in former years, I do not use it now, and do not expect ever to use it again. Adenotomes of various forms are also in vogue.

Gottstein's curettes, however, with all their more recent modifications, are admirable instruments, as also is the human digit, unadorned with any artificial nail, in properly selected cases; and it is the use of the two latter that I advocate.

In older persons, or in large children, who have sufficient self-control to remain still, in obedience to orders, general anesthesia should never be resorted to. The operation can then be performed with the patient in a sitting posture. The nasal passages are first cleansed by antiseptic sprays; next, a weak solution of cocaine is thrown into the naso-pharynx and nose by an atomizer, followed by the application of five or eight per cent. solution, by means of a cotton holder, to the pharyngeal growth—the object being to partially anesthetize the parts for the operation, and also by shrinking the tissues to favor the free discharge of blood through the nasal passages.

Being thus prepared the patient opens his mouth widely. Then the operator, aided by head mirror and reflected light, with two or three sharp sweeps of the curette, clears the naso-pharynx of the adenoids. The whole should be done at the one sitting, if possible, care being taken to avoid injuring the Eustachian tubes during the operation. The hemorrhage is usually profuse, a very large proportion of the blood being discharged through the nostrils. If, on examination by the rhinoscope, fragments or little outside vegetations remain, these may be removed digitally. In some instances, if left to themselves, they will shrink entirely away.

After treatment in these cases is very simple. Instructions to the patient to keep the parts free by blowing the nose frequently and clearing the throat by forcible inspirations, together with the

use of gargles and mild sprays for a few days, being all that is required.

Surgical treatment for children.—In this I am afraid I differ from many surgeons. First, I do not advise formal preparation of the nose and throat before operating. In the large majority of cases the children, having received no previous nasal treatment whatever, will resist any interference. By attempting it, abrasions of mucous membrane are likely to be made; and no matter how thoroughly you or the nurse may believe that you have cleansed the parts by swabbing or spraying, it is impossible for you to place the naso-pharynx in a thoroughly aseptic condition. Therefore I do not attempt it at all.

I advise, however, that the child have the bowels moved by a cathartic before operating, and that no food be given on the same day until some hours after the operation is over. A warm drink, however, will help to clear the pharynx and can do no harm.

When operating upon children to remove adenoids, it is usual to use one of the anesthetics. Of these, ether is not held in much favor, owing to the pharyngeal hyperemia which it is likely to produce; while bromide of ethyl and nitrous oxide are widely used in England and the United States. Personally, however, I prefer either chloroform or the A. C. E. mixture, administered by a fellow practitioner, and when carefully given, these have always proved themselves both safe and reliable.

Before operating the surgeon's hands are rendered as aseptic as possible. The patient's outer clothing is removed, all bands are relaxed, and he is placed upon his back upon a level operating table. After anesthesia is produced, the mouth gag is inserted, the child's head is thrown backwards, and the adenoids are removed by a single digital operation. The operation is a very quick one, the educated finger, in the briefest time, having swept the whole vault of its soft friable tissue. Profuse hemorrhage immediately occurs, and without waiting a moment, the little patient is turned at once upon his side, with head overhanging the basin, to permit of free outlet through the mouth and nose.

In cases in which there is reason to suspect hyperplasia, the curette is applied before resorting to the use of the digit; and in others where it is difficult or impossible to remove all the hypertrophied tissues with the finger, the curette is used subsequently—each case being treated according to the conditions presented.

After Treatment.—The child will frequently sleep for half an hour after operation, and possibly vomit some of the blood which has been swallowed; after which he will gradually regain consciousness and self-control, although he may remain irritable for a few hours, due to the soreness resulting from the operation. There may be a little oozing of blood for a while. On putting him to bed, however, he drops off to sleep, and frequently enjoys a better night's

rest than he has previously had for weeks, notwithstanding the oozing. There is usually little or no rise of temperature, and a quickly receding throat-soreness is all that the history gives.

Subsequent medical treatment is likewise *nil*, save for the administration of a laxative or a hydro-carbon, if absolutely needed. Nutritious drinks and mild diet being all that are called for. Why medicate with a temperature of 98 degrees, and a restored normal breathing?

The hemorrhage at the time of operation is a great cleanser. As a rule the child's nostrils become free the moment the obstructing adenoids are out of the way. Some ounces of blood are always lost, the passage of which fresh from the vessels clears out the nose and pharynx and carries with it many of the innocuous germs which may be present. At any rate, an operation, though apparently a severe one, which entails no subsequent fever and but little discomfort, does not demand any further treatment, save the oversight which the surgeon always has over his cases.

The question may be asked, Does new development of adenoid tissue ever occur after thorough removal? The answer is, sometimes, but rarely. Complete removal is usually a lasting removal. In some cases the evulsion of a good sized central segment will be followed by complete contraction and absorption of the remnants left behind. On the other hand, after every vestige is apparently taken away from the vault, a good sized adenoid body may form again, even to the second or third time. This is a matter which I believe is essentially constitutional—something, however, which can always in the end be overcome, by persistent and careful efforts of the surgeon.

THE ETIOLOGY AND ELIMINATION OF DIABETES.*

By G. Lenox Curtis, M.D., New York.

Contrary to all accepted authority, the author of this remarkable paper contends that *diabetes is never a primary disease;* it is merely he declares, a frequent concomitant symptom or sequela of either an inherited or acquired condition of the system which *is* primary, and which is as amenable to *appropriate treatment*, as any ordinary disease.

The unsuccessful and unsatisfactory results which, up to the present time have attended all proposed methods of treatment, is attributed to the fact that its pathogenesis has not been properly understood.

Derangements of the liver, the kidneys, the nervous system and the spleen have, each, in turn, been considered the offending cause of this most serious affection, and there is probably no case which does not exhibit a lesion of one or more of the organs mentioned. But as the "immediate cause of diabetes is something which interferes with the proper oxidation of certain elements of food, and as the presence of sugar in the urine occurs from, or is accompanied with lesions in organs differing greatly in structure and function, may there not be some common cause which, owing to an inherent or acquired weakness of one or the other of the organs mentioned, is able so to interfere with its normal action that oxidation is inhibited to a degree sufficient to induce the affection we are considering."

The author not only believes this view of causation to be correct, but he is satisfied that he has discovered the common cause—"the disturbing element which is responsible for the existence of every case of diabetes irrespective of the nature of location of the lesions to which it most directly relates."

"*This common and potent cause is syphilis—that nemesis of evil-doers, which ruthlessly invades every organ and tissue of the body and with its blighting touch vitiates every secretion and deranges every function.*"

"This discovery is not the forced assumption of a theory, it is one of the results of the observations and investigations begun twenty-five years ago and carried on for a long period, for the purpose of discovering the cause of interstitial gingivitis, a suppurative disease of the alveolar process."

*Abstract of a paper read before the American Electro-Therapeutic Association.

" I found that a great many of those afflicted with gingivitis also suffered from diabetes. Finally I discovered that in all patients affected with interstitial gingivitis, of systemic origin, syphilis, either inherited or acquired, could be traced, and that in spite of careful and thorough surgical and dental treatment a permanent cure could not be affected until the patient was subjected to a course of anti-syphilitic treatment."

The diagnosis cannot always be satisfactorily made from the history of the case, but " fortunately there are ways of determining the existence of syphilis independently of any history the patient may give. Syphilis never invades the system unaccompanied by telltale signs of its presence. The most important and reliable of these signs are first,* the eschar of Curtis, which may be seen upon the surface of the gums, cheeks, tonsils, pharynx, and sometimes upon the cornea and sclera ; and, second, the syphilitic spores which the microscope reveals in the freshly-drawn blood. The latter sign is of special importance because the presence of the spores is not only positive evidence that the suspected disease exists, but their disappearance, later, under the influence of appropriate treatment, is indisputable proof that the specific poison has been eliminated, and, consequently, that the treatment may be safely discontinued."

" Since diabetes is never a disease *per se* but merely an occasional accompanying symptom of sequela of syphilitic infection, the best treatment is that which will most readily and thoroughly eliminate the specific poison which caused it."

The most reliable and satisfactory treatment is that supplied by electro-ozonation. A brief outline-description of the apparatus which supplies electro-ozone is given. It " consists, practically, of an ozone generator, fed by a high tension coil, which multiplies the voltage of the commercial current a million or more times and practically eliminates all amperage. To the generator is attached brushes or corrugated wires, from which ozone is generated in large quantities, and, by a wire coil, a Geisler or other vacuum tube is connected, through which ozone is forced into and through the body.

Connected with the apparatus is an electric cabinet which generates light and heat coupled with ozone.

Although treatment by electro-ozonation, alone, is able to eliminate every vestige of syphilitic taint from the system, still, in order that the patient may have the benefit of the eliminative effects some drugs are able to produce, such alternatives as mercury and iodide of potash and such tonics as iron and veratrum viride are generally prescribed in addition.

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* This infallible diagnostic sign of syphilis was discovered by me over fifteen years ago. I fully described it in a paper entitled, " Syphilitic Localosis Alveolaris," which was read before the American Medical Association in 1898.

While the doctor is convinced that anti-syphilitic treatment by drugs alone is sufficient, in many cases, to eradicate both syphilis and diabetes in their initial stages, he is satisfied that a large percentage of such cases is incurable without the aid afforded by the current.

During the past seven years 20 cases have been treated by the method advocated. "All of them had either acquired or inherited syphilis. With the exception of two, all were restored to health with every symptom of diabetes eliminated. Of these exceptions one was lost sight of and the other was suffering from epithelioma. The average time required to bring about this result was about three months. The sugar usually disappeared from the urine by the end of the second month.

In only one of the cases successfully treated has there been any return of the sugar or of any other symptom. In this case after several days of high living and alcoholism, a mere trace of sugar was discovered. "Otherwise the patient who, when first treated, was invalided and whose urine contained 9 per cent. of sugar, is now in robust health."

This result, in the opinion of the doctor, is sufficient not only to substantiate his claim that he has discovered the real cause of diabetes, but also to demonstrate that this affection need no longer be considered incurable.

In regard to the restrictions of diet so irksome to the patient but so universally believed to form an indispensable part of all successful treatment, the doctor, under the method of treatment he pursues, finds them entirely unnecessary.

"Allowing," he says, "that the sugars and starches are the food elements from which the system derives the greater part of its vital energy, it seems to me that their restriction is more prejudicial to an invalid than to a person in a state of health. Under no circumstance do I enjoin my patients from using the carbo-hydrates freely, and it is to this fact that I attribute their comparatively rapid recovery; for so great is the nutritive power of electro-ozonation over the processes of digestion, assimilation and elimination, that under its influence the system is able to derive all of the nutritive benefits these highly important foods are able to bestow."

In conclusion, the doctor urges physicians "to test this method of treating diabetes." If electro-ozonation is not available, use the ordinary anti-syphilitic treatment; but if the two can be conjointly used, the desired results will be not only more satisfactory but more speedily attained.

Clinical Department.

Two Cases of Acute Hemorrhagic Pancreatitis. H. W. WEBBER, M.D, M.S. (LON.), F.R.C.S. (EDIN.), Assistant Surgeon to the South Devon and East Cornwall Hospital, in *The Lancet.*

CASE 1.—A man, aged sixty-one years, was suddenly seized with acute abdominal pain on July 24th, 1904. He had appeared to be in his usual health the same morning and after breakfast had walked a distance of about a mile to church, where he was a regular member of the choir. About 12 o'clock sudden violent epigastric pain attacked him; he was taken to his home and medical assistance was summoned. In the afternoon the pain continued with signs of collapse and some abdominal distension. Dr. A. B. Soltau saw him in consultation with Dr. M. L. Griffin and thought the symptoms pointed to a ruptured gastric or duodenal ulcer. At 11 p.m. (Mr. S. F. Lynch assisting) I opened the abdomen by a four-inch median epigastric incision and the cavity was found to contain clear blood-stained fluid but no gastric or duodenal contents. The stomach and duodenum were rapidly examined for perforation, none being found, and it was then discovered that the normal outline of the pancreas was replaced by a tumor composed principally of coagulated blood of the shape and size of a closed fist which bled immediately it was handled. The patient being in no condition to stand a search for the exact source of the bleeding a thick gauze plug was passed well into the hemorrhagic mass and brought out through the parietal incision which was partly closed by mass sutures of salmon-gut. A hypodermic injection of morphine (a quarter of a grain) and strychnine (one-thirtieth of a grain) was given. The patient never rallied and died about six hours after the completion of the operation. No post-mortem examination could be obtained.

CASE 2.—The patient was an American, aged fifty-nine years, but looking at least ten years older. He was said to have worked very hard at business for several years. He landed at Plymouth on the evening of June 11th, 1905, apparently as well as usual, and at 10 p.m. had some strawberries and an apple. At about midnight violent abdominal pain seized him with vomiting, and this continuing at 3.30 a.m., Mr. H. H.

Parsloe saw him and gave him a quarter of a grain of morphine hypodermically. This was repeated at 10.30 a.m. on June 12th. At 5 p.m. on that day he tried to get out of bed, pain returned with intense collapse, and he became cold, grey, and pulseless. With the injection of brandy and strychnine, the application of a mustard leaf to the precordium, and hot bottles to the extremities, he partially recovered from his collapse, and at 6.30 p.m. I saw him with Mr. Parsloe. He was then ashy grey, in fact, with coldness of the whole body, except the parts kept warm by the hot bottles and friction. The pulse could just be felt at the wrist. The abdomen was soft; it was not at all distended; there was no dulness anywhere or local swelling; there was some tenderness on palpating the epigastric area. The rectum was empty. The patient did not recover from his collapsed condition and died about midnight (June 12th).

Necropsy.—At the post-morten examination (on June 15th) there was no free fluid or gas on opening the peritoneal cavity. The gastro-hepatic omentum was distended with blood clot. The stomach presented a remarkable appearance, a subserous layer of clot covering the upper two-thirds of the anterior surface, leaving its lower third of the normal whitish color. The gastro-colic omentum, transverse colon, and great omentum were normal, but on turning these upwards to examine the posterior surface of the stomach a considerable amount of clot was seen through the posterior layer of the transverse mesocolon. On tearing through this and raising the stomach the source of the hemorrhage was found to be the pancreas which was represented by an irregular hemorrhagic mass of clot and pieces of pancreatic tissue. The whole mass of stomach and clot, etc., was removed for further examination, but circumstances causing this to be deferred for two days it was then found in an advanced state of decomposition.

The antecedent personal history in the second case threw very little light on the patient's condition. Some years previously a successful operation for radical cure of a right inguinal hernia had been performed, and for some months before his last illness he had complained of breathlessness on exertion.

In the first case there was a definite history of an injury. Seven months previously the patient, while rising to leave his seat on the outside of an electric tramcar, was thrown by a sudden jerk of the car violently against the handrail, striking himself on the left side of the lower part of the chest and frac-

turing his seventh rib. From this accident he made a very slow recovery, it being more than three months before he was able to resume his occupation.

A Case of Primary Suppurative Parotitis. J. Walter Carr, M.D. (Lond.), F.R.C.P. (Lond.), Physician to the Royal Free Hospital and to the Victoria Hospital for Children, Chelsea, in *The Lancet.*

The following case appears to be sufficiently exceptional to be worthy of record. The patient was a man, aged 79, who had suffered from several attacks of acute articular gout and of gouty eczema affecting the hands. About eight years ago he had double iridectomy performed for glaucoma. During the last year or two his urine had been abundant and of low specific gravity, averaging 1010, so that there was probably some granular change in the kidneys, but no albumen had ever been found. For several months before his last illness he had, for his age, been remarkably well and vigorous, both physically and mentally. During July last he underwent an unusual amount of exertion and excitement in connection with a Royal visit to his native city, but did not appear in any way the worse for it. Two days after this visit, on July 15th, he consulted his medical man, Dr. T. Mason Johnson, of Pendleton, Manchester, on account of a painful swelling of the left side of the face which he had first noticed that morning. This rapidly extended, and on the following day the patient was evidently seriously ill. On the evening of the 17th I saw him in consultation with Dr. Johnson and Dr. J. Dixon Mann, of Manchester. There was then a large, tense, brawny swelling, exactly limited to the region of the left parotid gland; the skin over it was very edematous, but it was only slightly tender on pressure, much less so than it had been on the previous day, a result, perhaps, of the patient's increasing mental apathy, for he was only semi-conscious, his tongue was dry, his urine contained a good deal of albumen, and his temperature was 101 deg. F. There were, in short, all the indications of marked toxemia. Next morning (July 18th) Mr. F. A. Southam, of Manchester, saw the patient with a view to operation, but as no fluctuation could be made out and the general symptoms seemed distinctly better it was decided to postpone making any incision. Glycerine and belladonna were applied to the swelling, and strychnine, perchloride of iron, and

brandy given internally. The improvement was maintained for the next two days; the mental condition became much clearer, the tongue moister, the albumen disappeared from the urine, and food was well taken. The temperature in the mouth varied between 99.6 deg. and 101 deg., and the pulse from 80 to 90. The local condition remained about the same. On the 21st the patient was evidently not so well and a little thin pus was noticed to be escaping from the left ear. Mr. Southam again saw him and although still unable to detect fluctuation advised immediate operation. This, however, was unavoidably delayed until the following day and by that time the patient's condition was one of extreme gravity; he was almost completely unconscious, the temperature had risen to 102 deg., and the rapid breathing, with abundant small crepitations, especially at the base of the left lung, indicated the development of hypostatic pneumonia, or even of a more acute pneumonic process. Nevertheless, as a last chance, gas and oxygen were given, and Mr. Southam made a short incision into the gland just below the line of its duct. No definite abscess cavity was opened but the whole gland was in a breaking down condition and infiltrated with pus. Fluid injected through the incision escaped in part through the external auditory meatus. A considerable quantity of the gland substance was scooped out and a drainage-tube was inserted. There was very little hemorrhage. The patient never recovered consciousness after the operation, his breathing became increasingly rapid, and he died early the following morning, the temperature rising to 106.6 deg. shortly before the end. It was noteworthy that throughout the illness there was no severe pain on opening the mouth or on masticating, such as is usually present in cases of mumps.

In the entire absence of any evidence of primary disease elsewhere the case must be regarded as one of acute primary parotitis, analogous, presumably, to acute pancreatitis, with which gland the parotids have anatomically so many points in common. In both, such an acute primary inflammation, especially leading to suppuration, is very rare, particularly so in the case of the parotids. A secondary parotitis, suppurative or non-suppurative, is met with fairly frequently, although its exact causation has given rise to considerable controversy. It occurs after certain operations, usually in connection with the abdomen or pelvis, and in association with some of the acute specific fevers and with various pyemic and septic conditions, especially after parturition; but judging from the very scant references in medical literature and also from the experience of

the four medical men who saw the patient, the primary disease must be altogether exceptional. At first the possibility of mumps was considered, but the patient's age, the absolute limitation of the disease to one gland, the brawny character of the swelling with marked edema of the skin over it, and the severity of the constitutional symptoms were sufficient taken altogether to exclude this disease. A gouty form of parotitis has been described by Dr. Debout d'Estrees, of Contrexeville, but would seem to be excessively rare and probably never leads to suppuration. The disease in this case was almost certainly microbial in origin, and the question arises how the gland became infected; presumably from the mouth, via Stenson's duct. There was, however, no obvious cause of sepsis in the mouth; the patient had had all his own teeth extracted many years before, not even a sigle stump being left, and wore a complete set of artificial teeth, which appear to have been kept perfectly clean. On examination, however, of the inside of the mouth a rounded swelling of about the size of a small pea was felt close to the orifice of Stenson's duct, if not actually over it; it did not feel like a calculus and was most likely a cyst. Very probably it hindered the escape of saliva, and so led to a condition which facilitated the ascent of microbes, in the way so well described by Mr. C. J. Bond in his address on Ascending Currents in Mucous Canals and Gland Ducts and their Influence on Infection, at the last meeting of the British Medical Association at Leicester. The intensely virulent character of the process was probably due largely to its occurrence in an old man with damaged kidneys and consequent greatly diminished resistive power to microbial infection.

A case of primary parotitis recently recorded was shown to be due probably to a pneumococcal infection, but the patient was only 55 years of age, had a distinctly septic mouth, and the inflammation quickly subsided without going on to suppuration.

One may perhaps regret that in my case an incision into the gland was not made sooner, but on the whole I am disposed to think that this would not have averted the fatal issue, as even a few hours before death there was no definite abscess cavity to drain and consequently it does not seem likely that the passage of toxic products into the blood which led to the fatal toxemia would have been materially prevented.

A Case of Acute Internal Hydrocephalus. Theodore Diller, M.D., Pittsburg, Pa., Neurologist to the Allegheny General Hospital; Visiting Physician to the Insane Department of St. Francis Hospital, in the *Medical Record.*

A girl, aged 4, was sent to me by Dr. Simpson, of Indiana, Pa., on May 27th, 1904. She was the third child of healthy parents. Her birth was uneventful. Her brothers and sisters are all healthy. She developed normally, and was in perfect health up to one and a half years ago, *i.e.*, up to the age of two and one-half years, when she became suddenly ill with a fever, which confined her to bed for a week. Recovery seemd perfect. Six months later (at the age of three) the eyes turned inward, first one and then the other. These internal squints grew more marked during the next six months, when the squint of the left eye became less pronounced than that of the right.

Five months before I saw her she had an attack which was characterized by high temperature, badly coated tongue, and suppression of urine and albuminuria, and which was thought to be an attack of Bright's disease. She did not make a good recovery. In March (two months before I saw her) she had vomiting attacks. She often screamed and jerked in her sleep; again she would sob and laugh alternately. For a time she was delirious—said dogs were after her, etc.

Early in April it was noted that she did not use the left hand as much as the right; and a couple of weeks later she began to drag the left foot. These palsies steadily increased; and in the meantime defects in articulation were noted.

When examined by me, the child was somewhat dull and irritable mentally. No alteration of sensation could be discovered. She had a marked internal squint in both eyes, more marked in the right than the left. She was able to walk alone, but there was marked spastic paralysis in left arm and leg. The left knee-jerk was greatly exaggerated. Ankle clonus and the Babinski toe reflex were present on the left side. There were beginning contractures in the left hand. An ophthalmoscopic examination could not be made. Articulation was somewhat defective.

On November 2nd (more than five months later) Dr. Simpson wrote me as follows: "When you last saw her she had an aggravated strabismus, and dragged her one toe when walking. Her condition rapidly grew worse. She had what was like an attack of indigestion, sick stomach, temperature of 102-3, obstinate bowels, etc., but was evidently more than that, for

afterwards she became perfectly helpless, and has remained in that condition ever since—about fourteen yeeks. She cannot turn in bed, or swallow solid food, or speak, or cry, except a slight whine. At times she moves her arms just enough to change their position. All the muscles in the legs are atrophied, more especially those of the calves of the legs, which are perfectly flat. The feet are drawn into the position of talipes equinus, and are nearly always rigid. The thenar and hypothenar eminence of her hands have disappeared, and her fingers are usually drawn tightly into the palms. However, on some visits, I find them relaxed and quite flaccid. She remains in the one position until changed, for she cannot turn in bed. She was quite emaciated, but has gained somewhat in flesh. Her pupils are equal. Pulse is about 100 and weak. Bowels and urine regular and involuntary. Temperature normal. She can take only liquid nourishment, and that in teaspoonful doses. Tactile and contact sense appear to be everywhere absent. When hungry, she attempts to cry, and will only take malted milk, and appears never to be satisfied. In swallowing, she has not the proper use of her tongue, for even in teaspoonful doses she will allow part of the liquid to run down over her mouth. She sees and hears and will often answer direct questions by nod of her head. She is certainly the most helpless little creature I have ever treated. I will add that she suffers no pain; she lies quietly all the day or night in the one position. She can not or will not protrude her tongue."

On December 19th (six weeks later), Dr. Simpson wrote again: "Since I wrote you, she gradually became weaker, and her condition not changing materially until she finally died of exhaustion. I removed the brain and had a good look at it, but owing to circumstances, I had to return it, so you will be minus a nice specimen. The condition was one of internal hydrocephalus. The sutures of the skull were not separated—I suppose for reason of the child's age, four and a half years. The cortex of the brain was almost smooth. The convolutions and fissures almost obliterated, and the brain itself giving one the impression that he held in his hand a bladder. Before I had the brain entirely removed, it accidentally ruptured, and about a pint of clear fluid spurted out on the floor. I made an incision down through the brain substance and could readily see the distended ventricles. The two hemispheres appeared about equal in size. During life, I had often noticed the child's head, and at times thought I could detect some enlargement, especially in the tem-

poral regions, but I was not positive of it. The skull cap was very thin, the saw going through it very rapidly."

It is likely that the fever from which the child suffered at the age of two and a half years was the first manifestation of an internal hydrocephalus, which more or less steadily progressed, and terminated the child's life two years later.

I am indebted to Dr. Simpson, whom I desire to thank for permission to record this interesting case, and for his excellent descriptive letters, which form the most important part of this contribution.

A Case of Abdominal Pregnancy Undiagnosed Until After Operation. A. J. Ronginsky, M.D., New York, Instructor in Diseases of Women at the New York Post Graduate Medical School Attending Gynecologist to the Lebanon Hospital Dispensary, in the *Medical Record.*

The complete ignorance of the true pathological condition of the following case, although the woman had been attended by no less than fourteen physicians at one time or another, is certainly of interest to the profession at large.

Mrs. L., aged 39, Russian, always attended to her house work, married at the age of 21, gave birth to seven children, oldest 16 years, youngest 11 months. Labors normal. Had one miscarriage seven years ago, and was curetted for same at the Gouverneur Hospital. Her menstrual history was regular as to time, quality, and quantity. She never menstruated during lactation.

On June 10, 1904, she appeared at my office complaining of pain in the epigastric region, and slight vomiting. On examination, nothing objectively could be discovered, and I thought her indisposition to be due to an acute attack of indigestion. I prescribed the usual remedies. She called again the next day, slightly improved, but still had some pain in the epigastric region. Assuming that my diagnosis was correct, I continued the treatment on the same line. She felt greatly improved until June 14, when I was called to her house, she having had another attack of pain in the abdomen and some vomiting. On examination, I found her abdomen slightly distended, with tenderness in the epigastric region. Assuming that all her symptoms were due to constipation from which she had suffered for the past three days, I prescribed small doses of calomel to be followed by

a saline. On calling the next morning I found her very much improved.

I next saw her on June 21. Her condition had undergone a great change. She was very anemic, her abdomen was markedly distended, she was more or less emaciated, telling me that she lost nine pounds by actual weight. She presented a true clinical picture of one suffering from intestinal obstruction due to a malignant growth. Her condition rather alarmed me, and I advised that a consultant be called in, but she felt better the same afternoon.

I saw her again on June 25th, and her condition instead of getting better, grew worse since my last visit. The distention was very marked, the emaciation more apparent. Some one advised her to see a local surgeon, which she did on the previous day, but fainted in the doctor's office, and had to be brought home in a cab. The doctor called at her house a few hours later, and after examining her, prescribed digestive powders. Her general condition gradually grew worse and the obstruction became more marked. On July 1st, I asked a prominent stomach specialist to see her with me, and after a careful examination he thought the patient suffering from a general neurosis of the intestinal canal, causing spasmodic contraction of the walls of the intestines from which resulted the pain and obstruction. He advised appropriate treatment, and the patient felt somewhat better for a few days, but on July 5th, she again had an attack of pain in the abdomen which lasted for about two hours. I gave her a high rectal enema of ox gall and olive oil, which relieved her only slightly.

At this stage of her illness I confessed to her family that I was rather puzzled as to her condition. I advised that the same consultant see her again. We met on July 10th, and after a thorough examination the doctor thought that she was probably suffering from a malignant growth of the cecum, but no mass could be felt. The same treatment was continued with the addition of a stomachic tonic.

The fact that the patient had lost twenty-five pounds by actual weight, that the obstruction was on the increase, and that she was severely anemic, made me think the diagnosis quite reasonable, and from now on I thought her condition to be hopeless, and tried to relieve her symptoms only. I saw her daily up to July 17th.

During the week of the 17th, a local physician was called in to see her without my knowledge. Later I was informed that no diagnosis was established by the doctor, and he also treated

her symptomatically only. The obstruction increased, the abdomen being so distended that the skin began to show signs of atrophy at some points. Not being able to make her comfortable at home, I advised her removal to a hospital, and on July 28th I had her admitted to one of our prominent hospitals. After being examined by the attending physician and surgeon, the gynecologist was called in to see her. A probable diagnosis of obstruction due to some growth was made, and an exploratory laparotomy was advised. The hemoglobin was too low, so the operation was deferred for the present.

Her condition slightly improved during the next few days, and she was operated on August 6th, and no sooner than the abdomen was opened a fetus of about three and a half months appeared at the opening. The greater portion of the placenta was attached to the small intestines, also to the ovarian end of the tube. She died three and a half hours after the operation, not rallying from the profound shock which she went into the minute the abdomen was opened.

I am fully aware that at times a secondary abdominal pregnancy as the case here, may puzzle the most competent expert for a time, but for a pathological condition to deceive completely over a dozen physicians, some of whom are considered the most competent in their special fields, should not pass by unnoticed. Every one examined her gynecologically and to no one was the condition of the uterus suspicious. I will repeat that if ever I saw a case of chronic obstruction of the lower bowel, this certainly appeared to be one. At the latter stage of her illness her abdomen had to be supported, and to put it in her words, "Her belly was too large to be carried by her thin emaciated body."

Therapeutics.

The Best Method of Administering Potassium Iodide.

Under this practical title Huhner writes in the *New York Medical Record* of April 1, 1905. He begins by reminding us that for therapeutic purposes potassium iodide should always be given in solution, well diluted, and if possible never on an empty stomach.

For dilution, several things have been used. Milk is by far the best, for it not only disguises the taste more effectually, but also prevents, to a great degree, the disagreeable after-effects of the drug. Another excellent vehicle is compound syrup of sarsaparilla. Mineral waters or ordinary pure water may also be used. The iodide of potassium should be diluted with about half a glass of the water or milk.

It is essential to have a perfectly pure preparation. Pure iodide of potassium can be taken for a very long time and even in large doses without causing disturbances of the gastrointestinal canal. Many of the bad effects of this drug are due to an impure preparation.

It is necessary to observe strict cleanliness of the skin (daily baths) while taking iodide of potassium internally. By so doing the disagreeable skin eruption may to a large degree be prevented, the eruption being due to the decomposition of the iodine salt excreted with the perspiration by the fatty acids, setting free the iodine, which acts as an irritant.

As a practical matter it is preferable not to write for a 100 per-cent solution. Several years ago the author wrote a prescription for potassium iodide to be given in drop doses, gtt. j to represent gr. j of the drug, and was surprised to be informed by the druggist that it was impossible to make up a 100 per cent. solution. On consulting the late Dr. Charles Rice (head of the general drug department of Bellevue Hospital) he showed the author that it was possible to make up such a solution, though with some difficulty. It became evident that most druggists would not take the necessary time and trouble, but would probably give a weaker solution. Where, therefore, accurate dosage is of importance, it is safer to prescribe a 50-per-cent. solution, two drops to equal one grain of the drug.

Iodide of potassium is incompatible with alkaloids and the

ordinary soluble metallic salts. While the patient is taking potassium iodide, calomel should not be dusted into the eye, for an effect may result similar to the application of a strong caustic on the mucous membrane. This point is fully discussed in all standard works. Small doses of the drug may produce symptoms of iodism, while larger doses, in the same patient, may not have this effect.

Potassium iodide should never be given in phthisis or when there is even a suspicion or tendency to phthisis. Its irritating effect upon the bronchial mucous membrane is a decided objection to its use in such cases. If, however, phthisis is associated with syphilis, it may be used to advantage.

Taking up next the more important conditions for which potassium iodide has been prescribed, the author endeavors to indicate the best method of administering it in each condition.

Syphilis.—It was impossible in this space to give anything like a complete discussion of the treatment of this disease. A bare outline only of the part played by iodide of potassium therein is presented. Practically it ought never to be given in the primary stage. In the secondary stage it should not be administered until the patient has had at least six months of treatment with mercury, preferably by inunctions. There is an exception, however, where some tertiary symptoms appear ahead of time (during the secondary stage) and threaten the integrity of some important organ, the brain, eye, etc. In such cases it is absolutely necessary to start with the drug at once, and run it up as rapidly as possible in a manner hereafter described. In the simple secondary lesions it is useless, but may provide beneficial in recurrence of secondary lesions. In an ideal case, after six months' treatment with mercurial inunctions, the writer starts the use of iodide of potassium with the well-known mixed treatment, using the formula:

℞ Hydrargyri iodidi rubri,..... gr. ss
Potassii iodidi, ... gr. cxxviij
Syr. sarsaparillæ co.,..... f℥j
Aquæ, q. s. ad ..... f℥ij
M. Sig. : 1 drachm t. i. d. after meals, well diluted.

After a few weeks, however, the author prefers to give the drug alone, and in solution, in doses of ten to twenty-five grains t. i. d., giving mercury by inunction off and on for another six months at the same time. Throughout the treatment especial attention is, of course, given to the care of the mouth, teeth, gastrointestinal canal, and skin.

When giving the drug in this way, and intending to keep up the same dose for a long time, it is the author's preference not to order it in drop doses, but in solution, as follows:

℞ Potassii iodidi, ... ℥viij to ℥x
Syr. sarsaparillæ co., ... f℥j
Aquæ, q. s, ad ..... f℥iij
M. Sig.: 1 drachm in half a glass of milk or water t. i. d. after meals.

Again, when giving potassium iodide in this manner for its specific effect, and not to counteract any particular symptom, the writer stops at the first symptom of poisoning, waits a little while, and then changes the dose.

Very different, however, is the method of administering in tertiary syphilis, especially when some vital organ is threatened. Here he does not stop simply because some pustulation or rhinitis occurs, but continues right on in increasing doses till more serious symptoms make it impracticable This is done for two reasons: First, by increasing the dose we may sometimes cause the symptoms of poisoning to disappear, while a larger one may not; and secondly, even if the symptoms do not disappear, or even get worse, it is far more important to saturate the system as rapidly as possible with the drug than to worry over a pustulation or rhinitis. In other words, we must endeavor to put as much iodide of potassium into the system as it can possibly stand, and also do it as rapidly as possible. The method carried out by the author consists in prescribing a 50 per cent. solution (gtt, ij=gr. j), and starting off with gtt. xx increase gtt. ij at each dose as follows: First day 20 drops in the morning, 22 drops at noón, 24 drops at night; second day, 26 drops in the morning, 28 drops at noon, 30 drops at night; third day, 32 drops in the morning, and so on. Given in this way ill effects rarely occur, and the writer has rarely had cause to stop it on account of unpleasant symptoms. At the same time the increase is rapid enough for ordinary purposes, although under extraordinary circumstances we may increase by four drops instead of two at each dose. The author has two patients at present taking between 500 and 600 grains daily, without any annoying symptoms.—*Therapeutic Gazette.*

Treatment of Epidemic Cerebro-spinal Meningitis:

Osler defines cerebro-spinal fever as "an infectious disease, occurring sporadically and in epidemics, caused by the diplococcus intracellularis, characterized by inflammation of the cerebro-spinal meninges and a clinical course of great irregularity." In discussing the treatment, and in estimating the success of any plan, the great irregularity in the clinical course, the grave character of the anatomical changes and the large proportion of fulminant cases against which we are absolutely powerless, must not be lost sight of.

In the absence of any specific remedy or antitoxin and our inability to jugulate the affection at the onset, the treatment is necessarily empirical and symptomatic. It is to be sincerely hoped that ere long, when various obscure points are better understood, *preventive measures*, rather than drugs, will clear the field and counteract the invasion of the germ. While these preventive measures are matters for the sanitarian and the Department of Health the individual should not neglect his efforts. Improved hygienic conditions with plenty of sunlight tend to lessen the danger of contracting the malady. As a prophylactic measure, the intranasal employment of germicides has been suggested in a recent editorial in the *New York Medical Journal*, March 25th, 1905, page 602. This is nothing new. Jacobi has advocated such procedures for scores of years as a preventive. Caillié's many eloquent appeals have done much to popularize the method of nasal toilet.

Preventive and prophylactic measures thus far have not been crowned with any degree of success. As stated above, the treatment is symptomatic. The mortality in different years varies within wide limits. At present it is about 65 to 70 per cent. In studying the various methods, no great differences in results are noticed.

In the very acute cases of the *fulminant* type, where upon autopsy little more than intense hyperemia of the meninges and cortex is found, death is the result of a profound toxemia. No remedy thus far emyloyed is of any service in this variety.

The onset of the disease, stormy or otherwise, does not enable the practitioner to forecast the subsequent course. The attack may be ushered in with severe symptoms which, in a few fortunate instances, subside in a few days or a week, and the subsequent convalescence is rapid. Nature, and not our remedies, works the cure in this type. Such cases belong to the *aborted or mild type.*

In other cases, the irregular and variable course leaves us in doubt as to the value of treatment. Exacerbations and remissions are frequent; unexpectedly a recrudescence or relapse will follow a short period of improvement. Each case must be judged by itself. *The strength of the patient must be maintained by proper nourishment and skilled nursing.* Nourishment and nursing are of

the utmost importance, particularly in the protracted cases. In other words, the fighting power of the body must be increased to resist the germ.

In private practice the patient should be isolated and placed in charge of a trained nurse, to secure the necessary rest of mind and body. The room should be well-ventilated and dark, or, perhaps, a bandage might be placed over the patient's eyes. The head and neck are to be carefully supported; at times raising the head of the bed six or eight inches seems to add to the comfort of the sufferer. The functions of the body must be regulated, and the bowels kept open. In the beginnining the catheter may be reuired. Plenty of water to drink and fluid diet are advised. The ordinary rules applicable to nursing of serious febrile cases should be carried out. The nasopharynx, so frequently the seat of trouble, ought not to be neglected, but should be irrigated. Warm salt solution ($\frac{6}{10}$ of 1 per cent.) slowly poured into the nose with a spoon will improve the breathing and prevent the dry mouth and tongue to a considerable extent. During the early stages, when swallowing is difficult from a paretic condition of the pharynx, and later on in bad cases, forced feeding through nose or mouth may be required.

The usual general recommendations were followed in our cases, both hospital and private. Cold applications to the head, ice-bags, etc., were employed as routine measures. The temperature, when above 103° F. was reduced by means of colon irrigations at 80° F., or mustard packs repeated every three, four or six hours as required.

Local abstraction of blood was not adopted. Many of our patients had been leeched without much apparent benefit before they were sent to the hospital. Ergot has been extensively used and highly vaunted, particularly in the earlier stages. Bromids have been advocated by many authors; they are inferior in their effects to the opium derivatives. Phenacetin, with or without codein, gave relief to the headache and general pains. In others, codein or morphine, by mouth, or hypodermically, was resorted to to relieve the restlessness and suffering. Iodids, so strongly recommended by various authorities, were given as a routine plan.

Various applications have been made to the spine, including Credé or mercurial ointment, without apparent benefit. In order to relieve the intracranial pressure, lumbar puncture was resorted to, with temporary benefit. It may be necessary, particularly in the chronic cases, to repeat the procedure at stated intervals upon the return of symptoms.

In a few cases, lysol injections were made, with but indifferent results. Warm baths at 95° F., given in the later stages, seemed to add to the patient's comfort and quickly relieved the contractures of the extremities and rigid condition generally. Sleep was secured in many instances.

The method of Aufrecht, initiated by him in 1894, has been followed by recoveries in two-thirds of the cases treated by Rogansky. Hot baths at 104° F. are given once or twice daily, an ice-bag being applied to the head. It is claimed that by these means consciousness is restored, the nervous system quieted and sleep is induced. The plan seems to be worthy of further trial.

A few words only regarding antitoxin treatment:—"That branch of bacteriology which deals with the mutual antagonistic relations of pathogenic germs is still in its infancy. The facts already discovered suggest important developments in the future. To what extent clinicians will be able to utilize these antagonisms in the treatment of disease it is difficult to foretell."—(*Medical News*, March 4th, 1905.)

A further contribution to the subject and one which induced Dr. Waitzfelder and other clinicians to resort to diphtheria antitoxin in treating cerebro-spinal meningitis was made by Dr. A. J. Wolff, of Hartford. He early found that there is a decided antagonism between the Klebs-Löeffler bacillus and the meningococcus, and during the course of study on this portion of the investigation found that pure cultures of the meningococcus were killed by the antidiphtheritic serum, and not only precipitated when mixed with the latter, but active bouillon cultures, when mixed in bulk with the antitoxin, are precipitated in the same manner.

The high expectations founded upon the laboratory experiments were unfortunately not realized, and the procedure after a careful trial was soon abandoned at Roosevelt and Beth Israel Hospitals. Even the intraspinal injections have not yielded better results

An interesting contribution is the following:—A little girl, three years and nine months old, previously healthy and in good physical condition, was given an immunizing dose (a suspected case of diphtheria having occurred in the same family), of 2,000 units at 2 p.m. The next day at 10 a.m. she was suddenly taken ill, became rigid, lost consciousness and vomited a number of times. When seen in consultation at four o'clock she was in deep coma, pulse imperceptible, numerous petechia over body and face, had vomited large quantity of grumous material. Subsequently "tarry stools." Large tracheal râles and evidences of pulmonary edema made us give a bad prognosis. Death, 8 p.m., due to malignant cerebro-spinal fever.

In conclusion, I would quote from my paper in the Gouverneur Hospital Reports for 1904, as follows:—"A careful consideration of the cause and a study of the pathological lesions, lead to the belief, that in future, preventive measures, rather than remedial agents, will overcome the dangers of the greatly dreaded cerebro-spinal meningitis."—FRANCIS HUBER, M.D., N.Y., in *Archives of Pediatrics.*

Physician's Library.

The Era Key to the U. S. P.—A Complete List of the Drugs and Preparations of the United States Pharmacopœia. Eighth decennial revision (1905). Vest pocket size; 83 pages; price 25 cents. The Pharmaceutical Era, Publishers, 90 William Street, New York.

The publishers announce a new edition of the well-known "Era Key to the U. S. P.," whose object is to further the introduction and employment of the official drugs and preparations of our National standard, the United States Pharmacopœia, the eighth revision of which is now in force. The book comes in vest-pocket size and gives in a "nut-shell" all the essential information required by the physician who desires to prescribe pharmacopœia remedies—their official names, synonyms and constituent parts, with average doses in both metric and English systems. The idea of putting the essential information of the Pharmacopœia in so small a compass is claimed to be original with the publishers, under whose direction the little work was compiled. The busy physician will find it both helpful and suggestive in his effort to prescribe official pharmaceutical preparations.

A Treatise on Diagnostic Methods of Examination.—By PROF. DR. H. SAHLI, of Bern. Edited, with additions, by FRANCIS P. KINNICUTT, M.D., Professor of Clinical Medicine, Columbia University, N.Y.; and NATHANIEL BOWDITCH POTTER, M.D., Visiting Physician to the City Hospital and to the French Hospital; and Consulting Physician to the Manhattan State Hospital, N.Y. Philadelphia and London: W. B. Saunders & Company. 1905. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto. Octavo of 1008 pages, profusely illustrated. Cloth, $6.50 net; Half Morocco, $7.50 net.

We have been anxiously awaiting the publication of Dr. Sahli's great work in English. Its immediate success in Germany will certainly be repeated in this country, and the English-speaking profession owe to Messrs. W. B. Saunders & Company a debt of gratitude for their enterprise. Not only does the distinguished professor exhaustively consider all methods of examination for the purpose of diagnosis, but the explanations of clinical phenomena are given and discussed from physiologic as well as pathologic points of view, and with a thoroughness never before attempted in any clinical work. The examinations of the stomach, sputum.

feces, urine, and blood are exhaustively treated. There is an article from the pen of Dr. Theodore C. Janeway giving a brief review of the investigations of American and English observers upon the value of the clinical estimation of blood-pressure, with a description of some newly devised instruments. Some of the new features in the chapter on urine examinations are: Seliwanow's reaction for levulose, Bial's test for pentoses, and quantitative determination of urochrome after Klemperer. Osmotic pressure and cryoscopy of the urine are also discussed at length, and a description is given of Liebermann and Posner's method of staining urinary pigments. In the chemical examination much attention is directed to describing methods; and this is done so exactly that it is possible for the clinician to work according to these directions. The nervous system has been very elaborately detailed, giving unusual space to electric examination. Indeed, the American edition of this great work contains all the material of the new fourth German edition, with which it simultaneously appeared. Many new illustrations have been added by the editors. The work is indispensable to the practitioner.

A Manual of Diseases of the Nose and Throat.—By CORNELIUS GODFREY COAKLEY, A.M., M.D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York City, etc., etc., etc. Third edition, revised and enlarged. Illustrated with 118 engravings and 5 colored plates. Lea Brothers & Co., New York and Philadelphia.

This, the third edition of this practical work, has been carefully prepared and made to conform with recent advances in Rhinology and Laryngology. We notice that Chapter VII., on Diseases of the Accessory Sinus, has been entirely re-written. The work is certainly a compact manual which will be of great service to both practitioners and students.

Photographic Atlas of the Diseases of the Skin. Physician's Edition. In Four Volumes. A series of 96 plates, comprising nearly two hundred illustrations, with descriptive text, and a Treatise on Cutaneous Therapeutics. By GEORGE HENRY FOX, A.M., M.D., Professor of Dermatology, College of Physicians and Surgeons, New York; Consulting Dermatologist to the Department of Health, New York City; Physician to the New York Skin and Cancer Hospital, etc. Vols. I. and II. Philadelphia and London, J. B. Lippincott Company.

Dermatology is a department in medicine practised by all general practitioners. All cases have practically been through the hands of general practitioners before they are referred to the Dermatologist proper. How great is the need, therefore, for all

general practitioners to have a good working knowledge of this subject. In the two volumes of Fox's Atlas, we have been privileged to examine, will be found splendid plates and concise practical text. If the other two volumes, which complete the set, are in the same class as these, the entire work then will be one of the greatest practical value to all who practice general medicine. The work deals more with the commoner diseases of the skin, all the reproductions being of a life-like character. The volumes are exquisite models of the bookbinders' art; the illustrations, mostly full page, are simply superb. We believe that the entire work will be a great delight, pleasure and profit to all who possess it.

Introductory Physiology and Hygiene.—A Series of Lessons in Four Parts. Designed for use in the First Four Forms of the Public Schools. By A. P. KNIGHT, M.A., M.D., Professor of Physiology Queen's University, Kingston, Ont. Toronto: The Copp, Clark Company, Limited.

So far as this little work, designed for teaching children some practical points in hygiene and physiology, concerns itself with hygiene, it can be commended. Physiology is a subject, in our humble opinion which should not be taught to children, and, indeed, adults can gain no particular good from a superficial knowledge of their organs and functions thereof.

A System of Physiologic Therapeutics. By SOLOMON SOLIS COHEN, A.M., M.D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College, Vol. VIII, Rest, Mental Therapeutics, Suggestion by FRANCIS X. DERCUM, M.D., PH.D., Philadelphia. Philadelphia: P. Blakiston's Son & Co. 1904.

The importance of rest in the treatment of disease is well recognized by the medical profession. Rest may be said to be the most general remedial agent in therapeutics. In the present volume the method of rest treatment known as "rest cure" is fully discussed and the method to be followed in neurasthenia, hysteria, and in allied neuroses is described in detail. The second part of the volume is taken up in discussing the therapeutics of mental diseases. This is an important subject and deserves more attention than is given to it at the present day. The concluding section of the book deals with the most interesting and important subject of suggestion. The influence of the mind in the etiology and on the course of disease deserves close study and, as a rule, the more familiar the physician is with these relations the more successful he is in practice. We can recommend this volume as a clear concise treatise on the subject considered in the text.

Practical Massage in Twenty Lessons.—By HARTVIG NISSEN, Instructor and Lecturer in Massage and Gymnastics at Harvard University Summer School; Director of Physical Training, Brooklin Public Schools; Former Acting Director of Physical Training, Boston Public School; Former Instructor of Physical Training at Johns Hopkins University and Wellesley College; Former Director of the Swedish Health Institute, Washington, D.C., etc., etc. Author of "Swedish Movement and Massage Treatment," "A, B, C of Swedish Educational Gymnastics," "Rational Home Gymnastics," etc. With 46 Original Illustrations. 168 Pages. 12mo. Price, Extra Cloth, $1.00, net. Philadelphia: F. A. Davis Company, Publishers, 1914-16 Cherry Street.

The general practitioner will find in this concise book much good, practical knowledge on massage. The writer has had thirty years' teaching as a practical masseur.

Manual of Diseases of the Eye. By CHARLES H. MAY, M.D. Fourth edition, revised. New York: William Wood & Co.

This is the best manual we have seen for the use of students. The arrangement followed leads the reader by a common sense path from simple inspection to the more difficult problems, and each step is made plain. The Anatomy and Physiology of the constituent parts is placed in small type as an introduction to the discussion of each such part. No useless words are introduced, but the language is clear, free from ambiguities, and sufficient. The illustrations are unusually excellent. The result obtained by the author is an up-to-date text-book, sufficiently comprehensive to permit the student to arrive at a useful and fairly thorough knowledge of the diseases of the eye with a reasonable expenditure of the limited time at his disposal.

This volume should have a good sale among final students where diseases of the eye form an essential part of their examination for degree. D. J. G. W.

A System of Physiologic Therapeutics. By SOLOMON SOLIS COHEN, A.M., M.D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College. Vol. VII, Mechanotherapy and Physical Education including Massage and Exercise, by John K. Mitchell, M.D., Physician to the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases; and Physical Education by Muscular Exercise, by Luther Halsey Gulick, M.D., Director of Physical Training in Public Schools of Greater New York. With 229 Illustrations. Philadelphia: P. Blakiston's Son & Co. 1904.

This, the seventh volume of Cohen's system of Physiologic Therapeutics, is devoted to the description of the methods and technic of massage and to exercise as a remedial agent. The value of exercise in physical education as well as in the treatment of diseases, as obesity, gout, heart disease, deformities, tabes dorsalis and infantile paralysis, is pointed out and the method to be followed in each disease is fully discussed. In the chapter on massage, after explaining the various methods and giving the indications and counter indications for its use, the author describes the technic in the diseases in which it is of therapeutic value. The text is well illustrated, which greatly enhances the value of the work to a practitioner. In the addenda chapters on orthopedic apparatus, corrective manipulations in orthopedic surgery (including "Lorenz method"), and on physical methods in ophthalmic therapeutics appear and form an important addition to the book.

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ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

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COMMENT FROM MONTH TO MONTH.

A news item which appeared in our news pages in the October issue, which came to us from Winnipeg, stated that during the month of September there had been 229 deaths in Winnipeg, thirty-seven of which had been caused by typhoid fever, a disease which has been again rather too prevalent in the Prairie City this fall. Our attention has been called to this again by a clipping from the Winnipeg *Free Press*, in which one of our much respected subscribers quotes the DOMINION MEDICAL MONTHLY, and points out that although these deaths occurred, no mention of the fact was made that these cases of typhoid fever did not all originate in Winnipeg. Such being the case it is but fair to point out that Winnipeg is being unjustly treated when all these cases are spoken of as having originated in that city. There are, it seems, many cases which would never be brought to Winnipeg if it were not for the hospital facilities that the city affords. Having set this aright, we may be permitted to say that it is unfortunate for a progressive and thriving city, that every autumn it is visited by an epidemic of typhoid fever of enormous proportions. Experts have been called in for their advice, but all to no good end; and it appears alto-

gether quite probable that those in charge of sanitary matters in that province and city are quite competent to deal with the matter, and deal with it effectively and promptly if given a free and untrammeled hand. To one at a distance and not on the spot, after reading the reports, interviews etc., in the public press, it would appear that there are three prime things to be done in Winnipeg, namely, wipe out all box closets, establish a visible water supply and have the administration of all health matters in the hands of a competent board and health officer, altogether independent from aldermanic influence, which may be up to-day and down to-morrow.

Patients in the wards of most hospitals are divisible into four classes: Charity patients, who do not contribute anything themselves; public ward patients, who pay so much per diem; semi-private and private patients, who may pay all the way from $7.00 per week to $18.00 per week. Any one can present himself to most hospitals without enquiry and ask to be admitted to a public ward, a semi-private or a private ward, according to his own knowledge of his ability to pay. Most of the occupants of these, having paid for their week's board and lodging in advance, will then look around for medical or surgical attendance, which, as they are in a hospital, of course must be supplied by the institution gratis. Now, upon what financial basis is a hospital going to determine the ability of a patient to pay for these respective wards, because they are apparently for different grades or classes of society, that is from a financial standpoint. Where we have a hospital establishing the rule that all entering a public ward at say $3.50 per week, which the patient pays himself or has paid for him, shall be attended by that physician or surgeon of the staff to whom he is allotted, without any fee whatsoever, and thus placing that patient in that respect on a par with pauper patients, who pay nothing whatsoever for themselves, but are paid for in part by the municipality, then a very grave injustice, an exceedingly serious injustice is being placed upon a class of men who, all the world over, are ever ready to stretch out a helping hand to the poor and needy who may require either medical or surgical advice or attendance. It is because of this noble principle inherent in the profession of medicine, which is dissociated altogether from any mere commercial gain, that the profession of medicine is imposed upon not alone by notorious sinners, but by men who are enlightened, intelligent, educated. Take for instance the case of a girl earning $5.00 per week in a factory, and a girl earning $12.00 per week in a counting-house. Are these two to be classed in the same category when admitted to a hospital? Manifestly the first cannot pay for either hospital maintenance or professional attendance. There is

no question that the second should not be admitted as a pauper patient. If she pays $3.50 per week to the hospital, just what she pays for her board in her lodging-house, why should she get free treatment for an illness of six weeks say, when she is perfectly able to pay for medical attendance, which might amount to $50.00, and pay for it in the course of the next five or six months. The chances are that she will not need a doctor's attention again for five or a dozen years. People do not get sick every year. There are some fortunate enough not to need a doctor for a dozen or more years. The thing is most absurd, is downright foolish and ridiculous and is most reprehensible, and especially so when it proceeds from business men, and more so when it proceeds from acknowledged successful business men. Hospitals were originally designed for the poor, to provide medical and surgical treatment for them, as well as nursing, and that care and attention necessary to promote good health which could not be obtained in their homes. A process of degenerating evolution, however, has taken place, for now they must be paying and profitable institutions. What right has a hospital, a great public charity, supported by governmental and municipal and private subscriptions, to be making money? What right has it to admit to its wards patients at $3.50 per week when they are able to pay $10.00 or more, and then establish a rule that because the patient humbugs them the doctor must also be gold-bricked? Did any one ever hear of a more silly abortion emanating from a business mind?

Albuminuria and eclampsia occurring during the course of pregnancy are ever of the keenest interest to those physicians practising the obstetric art. In connection with the cause of this condition, which is generally assigned to a toxemia, and which brings about renal insufficiency through a process of fatty degeneration of the renal epithelium, there are two items which apparently have not been taken into serious consideration. The first is the anti-marital renal condition of the primipara in whom most of the eclamptic attacks occur; the second is the subsequent condition in other paras. There must be a good reason for the incidence of eclampsia in primiparæ, but apparently it has not been sufficiently elucidated. Probably the most generally accepted view is that the resistance in the abdominal walls is greater in the primipara and hence the intra-abdominal pressure is also greater and its influence is thus exerted upon the renal veins. If this be the accepted view, there yet remains the fact that most obstetricians have practically no knowledge of the condition of the renal function prior to marriage and pregnancy; and it seems to be that along this line, some good work of an intelligent nature may be prosecuted in

future years. On the other hand, if the condition be due to a damaged kidney, why does not eclampsia develop in all subsequent pregnancies, which it does not? Here also is a field for investigation. So far as treatment is concerned, the proper treatment is preventive; but when an attack is precipitated, the standard treatment, morphia sulphate, gr. ½, by hypodermic injection, seems to be the popular one at the present day. This is to be repeated if required until 2 grains are administered in the twenty-four hours. Veratrum viride is a drug which has been found of much decided value both in the United States and Canada, but practically not entering into the therapeutics of eclampsia in Great Britain. It certainly, however, has a place in the treatment of the eclamptic seizure.

The Canadian Medical Association will meet in Toronto on the afternoon and forenoon immediately preceding the British Medical meeting. The exact dates will therefore be the 20th and 21st of August, 1906. Probably the most important item to be discussed will be that of re-organization; and there should be a full and representative meeting for that alone.

The question of an Academy of Medicine for Toronto is being revived by Dr. I. H. Cameron. There seems to be no good, real reason why the three Toronto Medical Societies should not be united as such. Now that all meet in the Ontario Medical Library should be an incentive to amalgamate under one roof.

Editorial Note.

Those members of the Canadian Medical Association who attended the Halifax meeting, particularly their wives, who have great reason to remember her kindness, will be filled with profound sorrow when they hear that Mrs. Eagar, wife of Dr. W. H. Eagar, of Halifax, died on the 9th of October. A bright and charming little woman, Mrs. Eagar endeared herself to all, because she was ever assiduous in exhibiting Halifax hospitality to the visiting members of the Association and their lady companions. We join in the kindly words of the *Maritime Medical News* in expressing our sincere sympathy to Dr. Eagar in his bereavement.

News Items.

HAMILTON, Ontario, is said to have four hundred consumptives.

THE late Senator Fulford left $25,000 to the Brockville General Hospital.

HAMILTON, Ont., has collected about $15,000 for a consumption sanitarium.

DR. WIGLE, of Wiarton, has been appointed a coroner for the county of Bruce.

DR. P. E. MCLENNAN has removed from Nelson, B.C., to Vancouver, B.C.

DR. H. H. MOORHOUSE, Toronto, has been appointed an associate coroner.

DR. NICKLE, of Mather, has taken the practice of the late Dr. Riddell, of Crystal City.

DR. JOHN WESLEY, Newmarket, Ont., has been successful in a suit for alleged malpractice.

THE Dominion Government will erect a detention hospital at Quebec, at a cost of $60.000.

DR. E. R. FRANKISH, Toronto, has returned to resume his studies in London and Dublin.

THE death is announced of Dr. A. Holmes Simpson, brother of Dr. R. M. Simpson, of Winnipeg.

DR. J. B. COLERIDGE, of Ingersoll, has been appointed an associate coroner for the county of Oxford.

DR. G. W. ELLIOTT, of Winnipeg, has been appointed Canadian Medical Inspector at Ellis Island, New York.

DURING September there were 166 patients treated in the Provincial Royal Jubilee Hospital, Victoria, B.C.

DR. J. M. LENNEY, Winnipeg, has been appointed divisional surgeon to the Grand Trunk Pacific at Winnipeg.

DR. H. L. LARGE left Shelburne a few weeks ago for Calgary, Alberta, where he will practice his profession.

DR. A. H. MACKLIN has decided to leave Mildmay shortly to go to Goderich and practice his profession there.

DR. F. MONTIZAMBERT, Director-General of Public Health, is in Victoria, B.C., on his annual tour of inspection.

THE Estate of the late Hart A. Massey, Toronto, has donated $100,000 to the proposed new Toronto General Hospital.

DR. MULVEY, of Minto, Man., who has been taking a post-graduate course in Chicago, will reside in Crystal City, Man.

WINNIPEG Civic Council will submit a by-law to the rate-payers to raise $150,000 for extension to its General Hospital.

IT is estimated that there are between 30,000 and 40,000 persons in the Dominion of Canada, affected with tuberculosis.

THERE is now $979,000 promised for the Toronto General Hospital, but between $1,200,000 and $1,400,000 will be required.

DR. D. KING SMITH, Jarvis Street, Toronto, announces that he will hereafter devote his practice exclusively to Dermatology.

DR. J. H. BELL, ex-mayor of Kingston, Ont., has been appointed medical health officer in succession to the late Dr. Fee.

THERE were no cases of typhoid fever reported in Winnipeg on the 30th of October, so the disease may be said to be abating.

THE number of visits made by the Toronto Branch of the Victorian Order of Nurses during the past four months was 2,120.

Dr. H. H. ALGER, of Stirling, and Dr. Wm. J. McKechnie, of Marmora, have been appointed associate coroners for Hastings county.

DR. E. S. TURNBULL, Branchton, Ont., McGill '04, has been appointed on the staff of the Protestant Provincial Hospital of Quebec.

DR. DUFF CAMPBELL, second son of Mr. D. D. Campbell, Listowel, has been appointed house surgeon of Harlem Hospital in New York city.

DR. BUCKE has sold out his practice in Kent Bridge. Dr. Bucke leaves shortly for Scotland, where he will take a post graduate course in medicine.

THERE were ten smallpox patients in the Toronto Smallpox Hospital during October, four were discharged and six remained in the institution at the end of the month.

DR. J. M. SHAW, of Keene, after nearly twenty-five years' continuous practice, will hand over his work to Dr. Harold Kindred.

DR. H. M. SPEECHLY, of Pilot Mound, Man., has been appointed a coroner in succession to the late Dr. Riddel, of Crystal City, Man.

THE Edmonton Hospital, "Misericorde," will soon be completed. The edifice will be four storeys high and will cover an erea of 100 feet by 50 feet.

THERE were 278 cases of typhoid fever in Ontario during September, with 45 deaths. There were thirteen cases of small pox, with one death.

DR. W. H. PHILP, of Arthur, is leaving that village to locate in Wappayello, Missouri. Dr. Philp taught school in Mulmur some years ago.

DR. STEPHEN LETT, Guelph, Ont., one of the founders of the Homewood Retreat in that city, died in that institution on the 11th of October.

THE erection of the New Alexandra Hospital, Montreal, is proceeding rapidly. When completed it will have accommodation for 112 patients.

THE Ontario Board of Health will recommend two vaccinations hereafter, and will recommend that a statute be passed making same compulsory.

DR. GEORGE W. ROSS, son of the Hon. G. W. Ross, Toronto, has been appointed Pathologist and Registrar to the Victoria Park Hospital, London, England.

DR. CHARLES DOHERTY, medical superintendent of the British Columbia Provincial Hospital, reports 362 inmates in the institution at the end of September.

NOTRE Dame Isolation Hospital, which has been called St. Paul's Hospital, Montreal, will be open for cases during the present month. It cost over $200.000.

OF the 4,952 deaths which occurred in Montreal in 1904, amongst the French-Canadian population, 2,855 took place in children under five years of age.

AMONG the provincial appointments gazetted recently was the following: "Dr. James J. Morrow, of Arthur, to be Associate Coroner for Wellington County."

DR. GEORGE D. PORTER, Bloor Street West, Toronto, has sold his residence to Dr. S. H. Westman, at present in Europe, and has taken a trip to the old country.

DR. FRANK BULLER, Montreal, one of the most famous eye and ear specialists of the world, died at his residence on the 11th of October. He was sixty-one years of age.

DR. HALDEN LOVE, late of Carleton Place, Ont., but now of North Dakota, is reported to have lost the sight of both eyes through a gunshot injury whilst out hunting.

THE nurses at Grace Hospital, Toronto, will hereafter do eight hours of practical work in the wards, and have eight hours allotted for sleep and eight hours for study and recreation.

THE Victorian Order of Nurses of Canada now have sixteen districts organized, with seventeen hospitals. During the past year 6,000 patients have been treated by the Order.

THE Ontario Board of Health is sending out circulars reminding contractors, lumber and mining men, that they must provide for the presence of a medical man in all of these places.

AT the beginning of September there were 60 patients in the Vancouver General Hospital, and 60 were admitted during the month. Forty-nine were discharged cured and seven died.

DR. D. A. CLARK, of Uxbridge, has sold out his practice to Dr. J. R. Walls, of Oakville, and is moving to Toronto, where he will continue the practice of his profession at 121 Carlton Street.

DR. C. K. CLARKE, the newly appointed superintendent of the Toronto Provincial Hospital, was, on leaving Kingston, tendered a banquet by the medical profession and other citizens of Kingston.

THE total number of patients treated in the Winnipeg General Hospital during the week ending the 14th of October, was 379, of whom 262 were men, 76 women and 41 children. The out-patients numbered 103.

DR. CLAUDE FREEMAN, late superintendent of the Hamilton City Hospital, sailed on the 4th of November from San Francisco for Shanghai, where he has received an hospital appointment at Chung-King.

DR. CHESTNUT, of Winnipeg, is the recipient of a handsome silver service from his brother practitioners of that city, on the event of his marriage. The presentation was made by Dr. H. H. Chown.

MR. THOMAS MCCORMACK, of London, Ont., has donated $6,000 for the purpose of a seven-roomed cottage on the grounds of the Muskoka Cottage Sanitarium.

DR. ROLLINS, of Exeter, who has been suffering from rheumatism for some time, has gone to the sanitarium at Battle Creek Mich. During his absence his practice will be looked after by Dr, Malloy, of Toronto.

THERE were ten deaths from diphtheria in Toronto in October. There were two from typhoid fever and none from scarlet fever. The number of cases reported was, diphtheria, 83; typhoid fever, 38; scarlet fever, 11.

DR. J. E. N. DE HAITRE has gone to Sudbury to practice his profession. The doctor is a graduate of the University of Toronto, and has been House Surgeon at St. Michael's Hospital in this city for some years.

THE following Associate Coroners have been appointed: Dr. G. D. Farmer, Ancaster, for Wentworth county; Dr. C. C. Casselman, Huntsville, for Muskoka district; Dr. R. W. Rooney, Shelburne, for Dufferin county.

DR. A. JACKSON MCLACHLAN, who has just finished his medical course, has accepted a good position as physician with a construction force on the new James Bay Railroad, with headquarters at New Liskeard, Ont.

THE Montreal League for the Prevention of Tuberculosis will have an institution for the reception of patients, at Ste. Agathe, to be known as the Brehner Rest, ready for occupation by the 15th of May next. Dr. A. J. Richer, Montreal, will be the physician in charge.

A CONFERENCE is to take place between the Trustees of the Toronto General Hospital, representatives of Toronto University and the Ontario Government. The present Board, which consists of five members, will likely tender their resignations and a new and larger Board be appointed.

THERE were 275 marriages in Toronto in October, as against 249 for the same month last year. The deaths were 317, as compared with 264 in October, 1904. The number of births registered were 737, as against 391 for the same month of 1904. The cause of this was due to sending out of notices by the City Clerk.

FIFTEEN nurses were graduated from the Toronto General Hospital on the evening of the 20th of October. Miss Snively, the lady superintendent of the school, read her annual report, which showed that there were eighty-eight nurses in the institution—three probationers, seventy-eight undergraduates and seven post-

graduates. Dr. R. W. Bruce Smith, Inspector of Hospitals and Prisons, presented the diplomas and badges and delivered the address to the graduating class,

ST. BONIFACE HOSPITAL STAFF, WINNIPEG.—The newly organized medical staff of St. Boniface Hospital held a meeting on the 19th October at which Dr. O'Donnell was elected President, and Dr. Jas. McKenty, Secretary. The staff consists of the following members: Consulting physicians—Drs. O'Donnell, J. R. Jones, Wm. Rogers. Consulting surgeons—Drs. England, McArthur, R. McKenzie. Attending physicians—Drs. Lambert, Nichols, Chas. McKenzie, Peatman. Attending surgeons—Drs. Todd, McKenty, Lehmann. Attending physicians, children's ward—Drs. Davidson, Dubuc, Slater. Isolated hospital for infectious diseases—Drs. Devine, Halpenny, Gardner, Teney, Howden. Oculist—Dr. Good. Pathologists—Drs. Bell, McLean, Turnbull. Heretofore St. Boniface Hospital has been an open institution. It will be the part of the newly constituted staff to see that from a scientific point of view the hospital is made one of the best in the country, as its premises are already among the finest, by making suggestions to the Board of Directors

WINNIPEG MEDICAL ASSOCIATION.—The annual meeting of the Winnipeg Medical Association was held on the 6th October at the medical library, McDermot Avenue. The report of the Secretary for the past year was read, after which the election of officers for the ensuing year was proceeded with, the following physicians being chosen to direct the affairs of the Association for 1905-6: President, Dr. Gordon Bell; 1st Vice-President, Dr. E. W. Montgomery; 2nd Vice-President, Dr. J. R. Davidson; Hon. Secretary-Treasurer, Dr. Charles Woollard. Executive Committee —Dr. Mary Crawford, Dr. Hugh Mackay, Dr. A. D. Carscallen, and Dr. N. J. McLean. An Archives Committee was appointed to collect and preserve the records of the Association and the papers read before it, the members of this committee being Drs. Beath, Vrooman and Woollard. In connection with the reports, the statement was made that the membership of the Association is now ninety-seven. Interest in it was never greater and a year of considerable interest and usefulness is looked forward to. The Association regretted having to record the deaths of two members of the profession, Dr. Riddell, of Crystal City, and Dr. W. Andrew, of Winnipeg. The retiring President, Dr. E. S. Popham, addressed the Association, reviewing the events of the past year and the aims of the Association generally. Dr. Gordon Bell made a brief and neat speech of acknowledgment of the honor of the presidency conferred upon him. After the regular meeting the members present, on invitation of the retiring President, Dr. Popham, repaired to Schofield's cafe where a sumptuous supper was enjoyed.

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Original Articles.

TRACHOMA AND IMMIGRATION.—OUR DETENTION HOSPITALS.*

By J. D. Pagé, M.D., Quebec,

Medical Superintendent Quebec Immigrant Hospital.

Gentlemen,—Trachoma is a disease to which very little attention has been paid yet by the practitioners of this country, and in which even few specialists have had much experience. The rarity of cases among our native population is the excuse for its having been overlooked in the past.

But it now seems that the profession should no longer be indifferent to this subject. Since the institution of medical inspection the immigrants landing at our seaports are subjected to a careful inspection of their eyes on their arrival, and a certain proportion are found affected with trachoma. We therefore conclude that, previous to the institution of this inspection a great many who were affected with the disease settled in the country and are now apt to spread the evil among us. Some have gone West to live on farms, a large proportion earn their living in our cities, while too many are professional *peddlers*, and these are not the least dangerous for the community.

Although it is not my intention to enter into any discussion as to the different views held by the profession regarding the spe-

*Read before the Canadian Medical Association, Halifax, August 24th, 1905.

cificity of the disease, I have been asked so often by practitioners what trachoma does consist in, that it will be my apology for giving a broad, as well as a brief, description of its clinical features.

Trachoma is characterized by the presence of granulations in the palpebral conjunctiva, with more or less inflammatory reaction, with or without discharge; following, in the majority of cases, a most insidious course essentially chronic, giving no subjective symptoms for a long period of time; pannus, eyelids distorted by the formation of cicatricial tissue and ulcerations of the cornea are the ordinary complications of trachoma, of which impaired vision and blindness are the ultimate consequences.

As to its etiology, so long as we are not agreed yet on the essential specificity of the disease, I shall merely quote what Sweigger wrote in 1885:

"The causes of trachoma must be sought chiefly in bad sanitary conditions. Badly ventilated, over-crowded rooms in houses, barracks, factories, may not only produce trachoma in a previously healthy conjunctiva, but give a trachomatous character to any chronic conjunctivitis."

It is an infectious disease, spread by contact, and experience furnishes undeniable proofs that the transmission may be due directly to spurting of discharge into the eyes during inspection or at operation, or indirectly to fingers soiled with the discharge, or to common use of toilet articles, etc.; a family may be infected by a trachomatous servant.

Lucanus does not believe in any particular individual predisposition, but Vennemann pretends, supported by statistics of careful observation, that there is certainly an individual predisposition. Where the predisposition is slight, only abortive cases, as they are called, arise; but if it is strong, distinct trachoma develops.

During the last few years the writings of some distinguished members of the profession in this country, among others Dr. Byers and Dr. Boulet, of Montreal, who have already read papers, the former before this association, and the latter before La Société Medicale de Montreal, also Dr. Prowse, of Winnipeg, have not failed to draw the attention of the authorities to the importance and the necessity of amending our laws concerning immigration in order to classify trachoma among the excludable diseases.

In 1897, the Congress at Washington passed a law in that direction, and since 1899 the eyes of all immigrants arriving in the American ports are being inspected by the medical officers of

the Marine Hospital Service, and if found to have trachoma, they are sent back to their port of embarkation at the expense of the shipping companies which have brought them over. Cases of doubtful trachoma are put into the hospital and retained there two, and perhaps three, weeks before a decision is arrived at.

In 1901 the American authorities became aware of the fact that intending immigrants were attempting to pass into the United States by booking for Canada and thereafter cross the line They therefore instituted a rigid inspection along practically the whole of the Canadian frontier. This accounts, as stated by Dr. Byers, for the enormous increase of the trachomatous patients during the following year in Canada. The effect was to give a practical solution to the suggestions that were actually made by the profession.

In 1902 the Parliament of Canada passed an amendment to the Immigration Act, which reads as follows :

AN ACT TO AMEND THE IMMIGRATION ACT.

[Assented to 15 May, 1902.]

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. *The Immigration Act,* chapter 65 of the Revised Statutes, is amended by inserting the following section immediately after section 24:—

"24 A. The Governor-General may, by proclamation or order, whichever he considers most expedient, and whenever he deems it necessary, prohibit the landing in Canada of any immigrant or other passenger who is suffering from any loathsome, dangerous or infectious disease or malady, whether such immigrant intends to settle in Canada, or only intends to pass through Canada to settle in some other country.

"2. Such prohibition may be absolute, or may be accompanied by permission to land for medical treatment only, for a period to be determined as provided by order or proclamation."

2. Any person landed in Canada from a vessel in contravention of *The Immigration Act* or any Order-in-Council or proclamation lawfully issued thereunder, or any person landed for medical treatment who remains in Canada in contravention of such order or proclamation, may be apprehended, without a warrant, by any immigration agent or other government officer, and may be compelled to return or be taken on board the vessel, and by force if necessary; and every owner or master of a vessel who violates the provisions of this Act, or who aids or abets any immigrant

or passenger in acting in contravention of such order or proclamation, or who refuses or neglects to take back on board the vessel any such immigrant or passenger, shall incur a penalty not exceeding ten hundred dollars, and not less than one hundred dollars in the case of each and every of such immigrants or passengers.

Extract from a report of the Committee of the Honorable the Privy Council, approved by His Excellency on the 15th August, 1902.

On a report, dated 26th July, 1902, from the Minister of the Interior, submitting with reference to the provisions of the Act, Chapter 14 of 2 Edward 7th, intituled "An Act to amend the Immigration Act," and in view of the large numbers of immigrants who are now coming from foreign countries to Canada and to the United States *via* Canadian ports, that it is expedient and necessary that a Proclamation be issued forthwith, in accordance with the provisions above referred to, prohibiting the landing in Canada absolutely of any immigrant or other passenger who is suffering from any loathsome, dangerous or infectious disease or malady, whether such immigrant or passenger intends to settle in Canada or only intends to pass through Canada to settle in some other country and whom the Minister of the Interior or officer to whom he intrusts the matter, considers should be absolutely prohibited from landing in Canada or permitting any such immigrant or passenger to land in Canada for medical treatment, only for such period as such Minister or officer may deem reasonable and sufficient to effect his cure, and authorizing such Minister or officer to take such action at the expiration of such period if any such immigrant or passenger so permitted to be landed for medical treatment is not then cured of the disease or malady from which he is suffering as may be necessary, and as can be taken under the provisions before referred to, to return such immigrant or passenger or to compel him to be taken on board the vessel from which he was so temporarily landed, and having so returned him or compelled his return to such vessel, prohibiting his being again landed in Canada.

The Minister therefore recommends that a proclamation in such terms be issued forthwith and that the Minister of the Interior be authorized to give any officer to whom he may entrust any action arising under such proclamation and the provisions before referred to, such instructions as he may deem advisable

and necessary for the conduct of such action in accordance with the terms and intention of such proclamation and provisions.

The Committee submit the same for approval.

(Signed) JOHN J. MCGEE,
Clerk of the Privy Council.

Dr. Byers, Montreal, who has furnished information to Dr. Treacher Collins, who wrote the introductory chapter to a recent book on trachoma, which I will have occasion to refer to later, said : " At first the Canadian inspection was of a rather loose character, but I am informed it is becoming more and more strict. Up to the present time," continues Dr. Byers, " a certain number of trachomatous patients have been sent back to their homes, but in numerous instances the patients have been admitted to the Canadian hospitals and allowed to go on their way after a more or less complete recovery from their maladies."

It was only in the spring of 1904 that the Governmnet took direct and absolute control of the detained immigrants, and completed the organization of their inspection and treatment by the equipment of Detention Hospitals, under the effective supervision of Dr. P. H. Bryce, chief medical inspector of the Department of the Interior, where the suspicious or recognized cases of trachoma are now sent for further investigation. They are kept there, sometimes a few weeks, to decide concerning the nature of the affection. Cases of trachoma that are found amenable to treatment within a reasonable length of time, are allowed to remain and be released when cured. But if the cases are hopeless, or doubtfully curable, they are deported.

I must not fail to mention here that undesirable immigrants, for any other cause than trachoma, are also kept in the Detention Hospitals until they are deported.

During the navigation season of 1904, over 800 were sent to the Quebec Hospital, while a little over 300 were deported from this port, representing a rate of deportment of 1.50 per 100 of the total number of arrivals.

Thirty-nine nationalities were represented among the detained people, the Russian Jews and the Syrians counting for more than one-half.

This season, at the time of writing, the number of detentions has reached 1,000, but note must be taken that, through some accidental infection on a ship, which was nineteen days crossing, 300 passengers were detained, the majority of which did not have to remain but two or three weeks.

As even cases of suspicious nature are kept until we are satisfied that they are harmless, it is becoming understood that, in the interest of all, such cases had better be kept on the other side until their condition is ascertained; it is the best way to avoid conflict of opinion. The consequence is that lately, a number of ships carrying several hundreds of passengers did not leave a single patient in the hospital. It is evident that the law, such as interpreted and applied, is producing the desired results.

I recently visited some of the Montreal dispensaries with a view to ascertain from the physicians in charge if they could appreciate in their practice the effect of this inspection such as carried out since the last couple of years.

At the Notre Dame Hospital, Dr. St. Dennis told me that until about a year ago they used to see an average of about twenty new patients every week, while now they see only an occasional old case. I received practically the same answer at the Hotel Dieu, from Dr. Lesalle. At the Montreal General, Dr. Sterling had only one old case to show, and he recognized that the law, as applied, seems to have cut short the importation of trachomatous immigrants. Dr. Sterling added that until recent years it was appalling to see at what a rate the shipping companies were bringing these people into the country.

The experience of Dr. Boulet of the Ophthalmic Institute, was corroborative of this statement.

At the Royal Victoria Hospital, I am told, they have had seven new cases, since the first of the year, out of 557 cases of diseases of the eye; but I do not know how this compares with the previous years.

In Quebec, at the Jeffrey Hale, where they used to see by far the largest number of trachomatous patients—as many as fifty a day—they report that they did not have six cases during the last year. At the Hotel Dieu, ten cases only are recorded during the last four years.

On the other hand, Dr. Prowse, of Winnipeg, informs me that the Winnipeg and St. Boniface Hospitals seem to have more than their share yet of trachomatous patients, but I do not suppose those cases are of very recent importation.

To the question often asked, "What line of treatment do we follow in dealing with trachoma?" our answer has been, "There is no universal method apart from strict hygiene, antisepsis and wholesome food," and there cannot be one, on account of the varied manifestations of the disease. The leading maxim must be a careful and conscientious individualization.

On their arrival at the hospitals, all patients are submitted

to a thorough and general cleansing, while their clothes are disinfected in special apparatus, as well as all bedding, as occasion requires.

All diseased or suspicious eyes between the intervals of active treatment by the hand of the surgeon, are repeatedly washed with mild antiseptic solutions by a trained nurse, who also supervises, with the strictest attention, their individual cleanliness.

When these precautions can be faithfully carried out, much better results can be expected than in dispensary practice, where the hygienic part is sure to be neglected at home.

Besides the ordinary medical treatment, mechanical and operative methods are resorted to as often as they may suit the cases, in combination with drugs. I now believe, according to the statement of Jacobson, that fewer weeks suffice to cure some bad cases of trachoma with certain operations than requisite in as many years by the old methods—more or less interrupted use of lotions—to leave the patient blind or unfit for work.

Notwithstanding the fact that we are morally satisfied that those people are actually freed from an affection which is considered threatening for themselves and dangerous for the community, nevertheless it must not be lost sight of, that trachoma is a disease which is apt to recur, and time should tell if it is wise to allow as many to be treated. Therefore, should any cases of recurrence be discovered at any time, their reporting to the hospital where they have been treated will always be considered as a favor. The results of our actual work, as far as we can be informed, should be our guide as to the maintenance or the modification of the present system.

It has been said in certain quarters that the United States were induced to pass their prohibitive law against trachoma for political ends and to satisfy labor unions, and that ours was not warranted by the facts. It has also been written that, " just at present trachoma was the hobby of the medical inspectors," etc., and that trachoma of typical severity only should be excluded. Ignorance regarding the question itself, as well as the measures of protection, which sad experience have taught other countries to adopt, is the only excuse for such statements.

As to the nature of the disease itself, we know that besides its insidious course, it is often difficult to distinguish it from benign forms of conjunctivitis; consequently, if trachoma of transient character only was to be excluded, I have no hesitation to think that it would not take many decades, at the rate immigration is actually pouring into Canada, before some sections of

the country would be as badly afflicted with the scourge as some regions of the old continent.

A few quotations from a recent and a remarkable work on trachoma by a German army surgeon, Dr. Boldt, translated by Dr. J. H. Parson and Dr. T. Snowball, will demonstrate the propriety of all prohibitive legislation against trachoma.

In the translator's preface we read that the book of Dr. Boldt embodies the results of many years' experience in one of the hotbeds of the disease, and contains the most complete list of statistics which has yet been collected, and they further state that "trachoma in England is an alien disease, imported by aliens, propagated amongst aliens, and handed over to the native population by aliens."

Dr. Treacher Collins, who wrote the introductory chapter to the English edition of Dr. Boldt's book, states that, out of all the confusing and contradictory observations which have been made in connection with trachoma, the contagious character of the affection stands to-day clear and undoubted.

"After the evacuation of Egypt, in 1803, the English army was disbanded and spread the disease broadcast."

A large proportion of trachoma in London has been generated in its pauper schools, and this was the origin of the foundation of several Isolation School Hospitals, of which the Hanwell School seems to stand as a model. It was erected in 1889, at the cost of £3,000, and the results have fully answered the expectation of its promoters.

According to the account of Sydney Stephenson, in 1895 the number of trachomatous patients in Great Britain averaged 6 in Scotland, 9 in England and 26.4 per 1,000 in Ireland of all eye patients. The statement about Ireland seems to justify the suggestion of the writer when he says: "If trachoma is to be stamped out of Great Britain, strenuous measures will have to be taken to check the disease from the sister isle."

After detailed remarks about how trachoma is dealt with in the schools and in the army, Dr. Collins continues: "It now becomes necessary to refer to a source which is tending to its increase, viz., the importation of aliens into this country from districts where the disease is endemic."

With this end in view, a movement is now on foot to have an alien immigration bill passed by Parliament, in which provision will be made for the inspecting officers to prohibit the landing of passengers suffering from any infectious and loathsome diseases, with the intention to have trachoma included among the latter.

With a sentiment of philanthropy which has oftentime honored the British race, Sir Ernest Cassell has placed at the disposal of the Egyptian Government the sum of £40,000 (*Lancet,* June 30th, 1904), to be used for the benefit of the sufferers of eye diseases in that country, a special object to be kept in view being the training of native medical men in the diagnosis and treatment of such diseases according to modern methods.

" In Australia, trachoma is chiefly introduced by immigrants, and, in the southern part, instead of the disease occurring in over-crowded districts and badly ventilated rooms, it is met in well-fed, strong, healthy farmers and their families, who are widely scattered over large areas and reside in roomy and well ventilated houses."

In Hungary, in 1886, a trachoma service was organized, the object being to ascertain every case of trachoma, insure its proper treatment, and prevent further infection. For this purpose three hospitals were erected besides those already existing.

In the Russian Empire a number of so-called " ophthalmic flying columns " were organized by the Board of Prevention of Blindness, and thousands of people received assistance from them.

Among the civil population trachoma is very prevalent also, and very few districts of Russia are quite free from it. Feur, who was officially charged by the authorities to examine the three southern districts of Torontal in 1884, found five per cent. of the whole population affected with trachoma, and he says that when the contagion has been sown among the peasant population it is scarcely possible to prevent its further spread.

In 1896 the struggle with trachoma in Prussia has been vigorously taken up by the state, aided by special Act of Parliament.

Within the last decade trachoma has travelled from the infected eastern provinces of Germany and the adjoining frontier by a distinct westward tract, following the lines of trade, and it is conveyed almost exclusively by migrating workmen, agricultural laborers, etc.

Lawrentjew, the oculist of the military district of Moscow, stated at the congress held in that city in 1887, that Central Russia, which had previously been free from trachoma, in the course of years became seriously affected, owing to enlistment of trachomatous recruits from infected areas in the West. All Russian authors have for years been urging that men affected with trachoma should be rigorously excluded. Lawrentjew also

justly asserts that trachoma was conveyed from the army into areas which were previously free.

From the foregoing remarks and information, which I believe to be impartial, I let everyone draw his own conclusions. I presume we all quite agree as to the propriety of our legislation concerning the exclusion of immigrants affected with loathsome and contagious diseases. But the consensus of opinion is not so unanimously reached when the time comes to deal with individual cases of trachoma. It causes the medical inspectors more anxiety than all other diseases combined, because on their decisions depend the success or the ruin of many legitimate ambitions. But on this subject I have very few words to say presently.

So long as a specific virus of the disease has not yet been identified, on the one hand, and its contagious character being recognized on the other, an honest, but firm opinion must prevail from a national point of view. Whether the intending immigrants come from the mother land of the first owners of this country, or from the great empire to which, as Canadians, we actually owe so many privileges in the enjoyment of equal rights, or from any other country, they have to be judged individually as to whether they are a gain or not for us, solely in view of the development and the future prosperity of our great Dominion.

MASTER-MINDS OF MEDICINE: II—THOMAS SYDENHAM, THE ENGLISH HIPPOCRATES (1624-1689).

By William J. Fischer, M.D., Waterloo, Ont.
Author of "Songs by the Wayside."

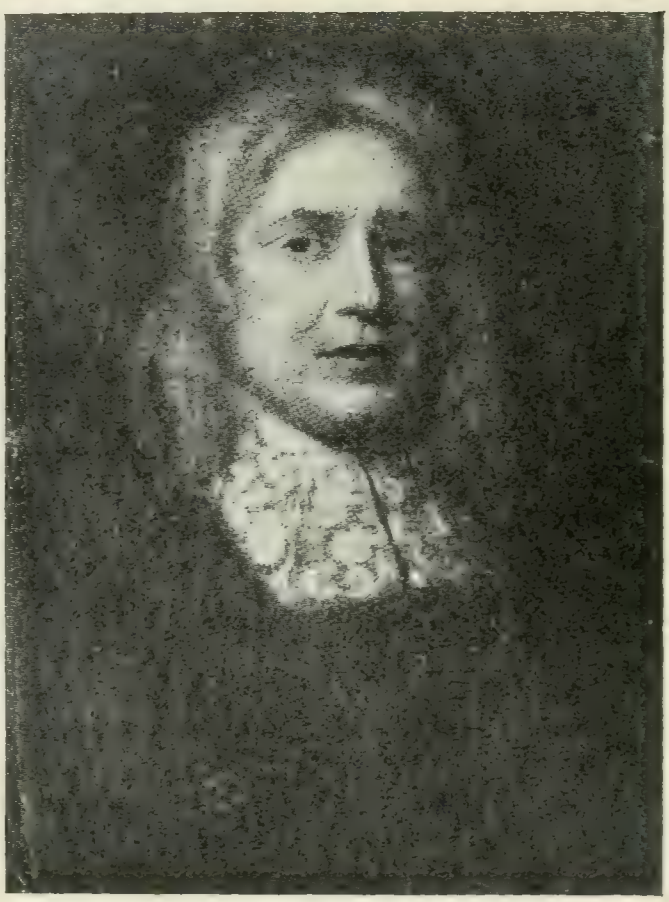
"As long as Almighty God shall give me life, I shall still press forward to my avowed end of doing all the good I can in my calling."—*Thomas Sydenham.*

Medicine is a practical science, and there are two open roads that lead great, thinking minds to a better understanding of it. Every doctor, in his daily routine work, comes upon these pleasant places, and recognizes the two strong currents of thought that tend to the perfection of a science which has made wonderful strides in advancement in past centuries and the present; currents of thought at once vital and important—the one scientific, the other practical, but both necessary to the solving of problems of real benefit to the great, throbbing humanity about us. We have, then, two schools in medicine—the scientific school, of which William Harvey was the founder, and the practical, or clinical, school represented by Thomas Sydenham. "The great merit of Sydenham," writes one, "was to proclaim the great truth that science was, is, and always must be incomplete ; and that danger lurks in the natural tendency to act upon it as if it were complete. The practical man has to be guided not only by positive knowledge, but by much that is imperfectly known. He must listen to the hints of nature as well as to her clear utterances. To combine them may be difficult ; but the difficulty is solved in minor matters by the faculty called common sense ; in greater affairs, by the synthetic power of Genius."

Thomas Sydenham, then, the English Hippocrates, as he is sometimes called, occupies a unique place in the history of medicine. In the words of Horace—"medicus in omne aevum nobilis"—he was a physician famous for all time. Dr. John Brown, the essayist, calls him "the prince of practical physicians ;" and it is said that Boerhaave, one of the most eminent teachers of medicine in Europe, never mentioned Sydenham without taking off his hat as a sign of respect and admiration.

"Sydenham's is a name," writes another, "not for England only, but for the world."

Many pleasant memories cluster around the humble little Somersetshire village, famous because it was the birthplace of this man of genius, who lived, like Harvey, at a time when his country's heart was in a state of wild unrest, and the staid old English character was being moulded into shape by these strong



THOMAS SYDENHAM.

influences of internal strife and disorder. Yet, withal, he emerged into the light of eminence with a character as noble as it was beautiful.

In an unknown little corner of England, at a place in Somerset called Wynford Eagle, Thomas Sydenham, the great physician, first saw the light of day. Old chronicles give the date of his baptism September 10th, 1624. Sydenham's biographers

all speak of the scarcity of material at their disposal concerning his life. The history of the seventeenth century is much clouded, and the life of Sydenham, like that of other contemporaries, could stand a genuine outburst of sunshine to bring out clearly the many little details that give color to the picture which the historian, not through any fault of his own, paints so poorly and imperfectly. Wynford Eagle is a hamlet and chapelry about eight miles from Dorchester. In the famous old Domesday Book it is called "Wynfort." The house in which Sydenham was born is an old gray, ivy-grown structure and stands to-day, a well-preserved building. "It lies," says one, "in a hollow, sheltered by the downs and upland pastures, and is a pleasing specimen of a seventeenth century manor-house. The front is composed as usual of three parts, each surmounted by a gable. The whole building is very solidly constructed of stone and flint." Even to this day one of the fields near the old home goes by the name of "Sydenham's."

Thomas Sydenham was the fifth son of William Sydenham —out of a family of seven sons and three daughters. His mother, a woman of pious mind, was a Mary Jeffery, daughter of Sir John Jeffery, of Catherston. Tracing the genealogy of the Sydenhams backward into the Middle Ages, we find that the family contributed some distinguished names to current history. One, Richard Sydenham, was a judge in the reign of Richard II.; another was a bishop in the reign of Henry V. A daughter of a Sydenham married Sir Francis Drake in Queen Elizabeth's reign. Then there were numerous members of Parliament, sheriffs and knights. Very little is known of the early life of Sydenham except that he was under the care and guidance of honest and conscientious parents. It is thought that his early education began at the grammar school in his native village or at Dorchester. Others, again, state as probable that, like many families of his day, he was instructed by the regular tutor living in the same house, or that the local clergyman, as was customary, instructed him in Latin.

At eighteen, Sydenham was sent to Oxford—the college selected for him being Magdalen Hall. Here he matriculated on May 20th, 1642. A turn in political events, however, soon put a stop to his academic career, which could not have exceeded a few months. The old, old struggle between the King and the Parliament was firecely raging. They were stormy times. There was much fighting, much bloodshed. Think of the influences they would bring to bear upon the life of Sydenham,

"who," as one writer puts it, "brought into matters of thought and science the courage of a soldier and the independence of a rebel." On August 22nd, the King raised his flag at Nottingham. The cry of civil war was in the air, and Peace, poor, white-souled thing, spread its wide wings and fled the country. Every Englishman with a heart in him had to decide on which side he would play his part. The young Sydenham espoused the cause of Parliament, notwithstanding that Oxford and its university were followers of the King. Anthony Wood, a contemporary writer, says: "Sydenham left Oxford without taking arms for the King as the other scholars did." Thus the lad of eighteen threw his books aside for a sword and the brilliant uniform of a soldier in one of the most memorable conflicts on the page of history. In looking over old records we often come across the name of the Sydenhams. Here it was a brilliant victory, there a display of courage and heroism under most trying circumstances. The "fighting Sydenhams," they were called—this father and his four brave, daring sons. Two of them died in battle—soldiers to the last. How a lonely mother-heart must have pined for the husband and the precious, valiant children!

We know very little of Mrs. Sydenham, but she must have been an heroic woman, full of the endearing qualities that ennoble lofty womanhood. For her, this war must have been a tragedy—awful and soul-crushing. She, herself, innocent victim, later was killed by the hand of a Royalist—a certain Major Williams. An old chronicler roughly tells how Thomas Sydenham—the loving son—avenged the wrong done his mother. It happened that he and this very Williams chanced to meet later on in battle. "For a soldier in the field to find himself confronted in arms by the slayer of his mother would be a crisis strange and startling enough to turn even a coward into a hero," writes Payne. "It must have roused the Sydenham blood, which was not that of cowards, to an unexampled heat. What followed must be told in the words of the old narrative, since we can add nothing to them, nor have we the right to take anything away:

"'So soon as Colonel Sydenham saw Williams, he spake to his men that were next to him to stick close to him; for, said he, "I will now avenge my mother's innocent blood;" and so he made his way to Major Williams, and slew him in the place, who fell dead under his horse's feet.'" Could anything be

more highly tragic than this sad event in the family history of the Sydenhams?

In passing, we might note, on account of its bearing on medical history, that Richard Wiseman, the most eminent surgeon of the seventeenth century—often called the Father of Surgery—acted as a surgeon on the King's side during the civil war.

In 1646, Sydenham returned to Oxford University. He says: "It is now the thirtieth year since the time when, being on my way to London, in order to go from there a second time to Oxford (from which the misfortunes of the first war had kept me away for some years), I had the good fortune to fall in with the most learned and honorable Dr. Thomas Coxe, who was at that time attending my brother during illness; and then, as he has been up to the present time, practising medicine with great distinction. He, with his well-known kindness and courtesy, asked me what profession I was preparing to enter now that I was resuming my interrupted studies and was come to man's estate. I had at that time no fixed plans, and was not even dreaming of the profession of medicine; but moved by the recommendation and influence of so great a man, and in some way, I suppose, by my own destiny, I applied myself seriously to that pursuit. . . . After spending a few years in the university I returned to London and entered on the practice of Medicine."

The war also had its depressing effects upon Oxford University, and sadly crippled it. The halls and rooms of the colleges had been turned into military garrisons, and the songs of the merry students were drowned by the shouts of busy soldiers, the former being very much in the minority. "Both the university and the colleges were impoverished by their quasi-voluntary gifts to the King; some of their buildings were in ruins, and there was, in Anthony Wood's words, 'scarce the face of a university left.'" This, then, was the condition of the university in the time of Sydenham, but, despite these circumstances, many bright minds lent a refreshing glow to the depressing picture. The intellectual life about Oxford, however, was a redeeming feature. Wallis, the great English mathematician, and Seth Ward, the astronomer, came over from Cambridge to add glory to it. Dr. Jonathan Goddard, Cromwell's physician, who constructed the first telescope in England, and Dr. William Petty, the economist and lecturer in chemistry, also frequented this noted seat of learning. Then,

besides, there were Christopher Wren, that "miracle of a youth," the noted Robert Boyle, Thomas Willis, the anatomist, and Robert Hooke, the chemist. This group of scientific men often met of an evening at the home of Dr. William Petty, where scientific discussions generally took place upon regular meeting nights. How pleasant it would be for us to picture Dr. Sydenham at one of these meetings, surrounded by this noted circle of Immortals. However, we have no record of him attending them; but we do know that he and Robert Boyle—one of the most brilliant members of the group—were fast friends.

When Sydenham attended Oxford, the Earl of Pembroke was Chancellor of the university. On April 14th, 1648, Sydenham was created Bachelor of Medicine. Some claim that he also received an M.A. degree, but Wood, the historian, denies this. "The modern reader," writes the biographer, Payne, "may wonder a little that medical degrees, involving professional privileges, were conferred as readily as honorary titles in arts or law are given at the present day. Sydenham could not at this time have made any serious study of medicine, having been barely a year resident in the university and in a time of great confusion. He had thus the rare good fortune to obtain a degree at the beginning, instead of at the end of his student's course. So much he owed to patronage. But if we consider the incalculable gain to the science of medicine involved in making Sydenham a doctor, we must admit that seldom has the blind Goddess of Patronage dispensed her favors with a happier hand."

In 1648, the young physician was appointed to a Fellowship of All Souls' College and, in March of the next year, the Senior Bursarship of the college was given him.

Comparatively nothing is known of Sydenham's life at the university. We are told, however, that "when Sydenham had returned to the university after three years' absence, he had forgotten his Latin, but recovered it by obstinate reading of Cicero, translating him into English and then re-translating into Latin, correcting from the original." Cicero, it is said, was always a great favorite of his. Sir Hans Sloane tells us that Sydenham always kept a bust of him in his study. In those days Oxford offered few facilities to the student in medicine. Sir Thomas Clayton—Regius Professor of Medicine—gave bi-weekly lectures on the doctrines of Hippocrates and Galen. Then, also, there were classes in anatomy—but the

study of anatomy was in its infancy almost, and little could be effected in this line. Not until Willis and Lower set to work did it gain any point of eminence.

"Sir Thomas Clayton, who held the chair in Sydenham's time, is said to have had a weakness which entirely disqualified him for his office, namely, that he could not bear the sight of blood." He finally resigned, and the chair fell to the famous Dr. William Petty, who is said to have studied at Leyden and Paris. Chemistry and botany were also important branches in Sydenham's time.

A second military service again cut short Sydenham's career, but we will pass over it in silence, for it does not bring out anything of importance that might add to or detract from the personality of this great English physician.

In 1665, Sydenham resigned his Fellowship in All Souls' College, and in the same year took unto himself as wife a certain Mary Gee—a Dorsetshire lady, it is supposed. The year following, he settled down to practice his profession at Westminster. His rooms were in the immediate neighborhood of Whitehall—the mecca of politicians, statesmen and parliamentarians. But a few blocks away lived the immortal Milton, the sweet, blind singer of "Paradise Lost." Is it not possible that the young physician might have been called in many a time to administer to the growing infirmities of the immortal bard? There is nothing left to tell us that he ever did so, but would it not be pleasant to draw so charming a picture about the life of so great a poet and so great a physician?

The neighborhood in which Sydenham lived had, as we will see later, a great bearing upon his own writings. He wrote mostly on fevers and agues, and the whole Westminster region —a swampy and malarious country—was a breeding spot for such diseases. Cromwell himself is said to have died of a malignant ague, probably contracted at Whitehall.

It is now an almost undisputed fact that Sydenham studied at Montpellier as well as at Oxford. French writers assert positively that he was the pupil of the celebrated physician, Charles Barbeyrac. This Barbeyrac had a wonderful reputation throughout the whole of France and other countries as a consultant. He was not connected with the university, but formed private classes amongst his students. It is said "some ten or twelve of them used to accompany him in his visits to his patients. On the way he would give them a sort of clinical lecture on the cases and their treatment, answering the numer-

ous questions of his pupils with excellent judgment and fluency. His ideas about many diseases were entirely novel, but lucid and well-founded. His practice was admirable, being at once simple and easy. He had discarded a large number of the useless remedies employed before his time, which served only to embarrass the sick man; making use of a few only, but those well-chosen and efficacious. These he employed so well that no physician ever had more successful and striking results from his treatment."

Barbeyrac's bedside clinics must surely have had a great influence upon Sydenham's wonderful mind. Locke, Sydenham's great friend, who also studied at Mountpellier, used to say that he never knew two men more alike in opinions and character than these two physicians. M. Bouteille, a Frenchman (1776), said that Sydenham had learned his cooling remedies in fevers (choses rafraichissantes) of Barbeyrac.

The date of Sydenham's return from France is not known, but we have reasons to believe that he was back in London in 1661. His observations (published later) on the weather and diseases in London begin with this year. He obtained his license from the Royal College of Physicians in 1663. The coveted Fellowship never fell upon his shoulders. "From all we know of Sydenham," writes Payne, "we should conclude that he cared little about academical distinctions, and doubtless bore the privation with equanimity. And, in later years, when the same difficulties might not have stood in the way, he had ceased to care what letters he could write after his name. The more surprising fact is that he did, after all, think it worth while to take a doctor's degree so late in life; but of his motives in so doing we have no knowledge."

Sydenham, however, like others, had friends and enemies as well in the college. A certain Dr. Andrew Brown, an intimate of his, tells us that Sydenham had once complained to him that "he had only gained the sad and unjust recompense of calumny and ignominy, and that from the emulation of some of his collegiate brethren and others, whose indignation at length did culminate to that height that they endeavored to banish him, as guilty of medicinal heresies, out of that illustrious society."

Some years after his return from Mountpellier, Sydenham was engaged in studying and investigating the epidemics of London. Just about this time that terrible calamity known in history as the Great Plague swept over London. It was another Black Death, strewing the land with suffering, sick bodies

and killing off young and aged—at one time at the rate of seven thousand a week. The plague swept away a whole cityful of people—the mortality tables showing sixty-eight thousand, five hundred and ninety-six deaths; statisticians claim that fully one-fifth of the inhabitants succumbed to the deadly disease. It quickly spread towards Westminster. The King and Queen went to Oxford. The dreaded peril lay right outside of Sydenham's own door, and the cries of the suffering stole into his study. Consequently, the doctor and his family moved to Dorset, a little spot a few miles from London. Many writers blame him for leaving London at this critical period. They assert that, as a physician, he should have considered it his duty to fight the disease in the dark valleys. Was it not a distinct loss to medicine, they further ask? Might he not have added a striking and interesting chapter to the history of medicine? But Sydenham had a wife and young children to pull at his heart-strings, and, after all, the sick did not suffer for want of medical aid, for there were physicians in plenty around. He wrote, however, of the plague, but his treatise did not make much of a stir.

But Sydenham was not idle during those plague-stricken days. He was busy with his pen during those months of absence from the city, and produced his first book on the "Treatment of Fevers"—a work of momentous importance to the course of medicine. The treatment of a few acute diseases such as rheumatism, pneumonia, and erysipelas, was also included. The title of the little book was: "Thomae Sydenham Methodus Curandi Febres, propriis observationibus Superstructa" (Thomas Sydenham's method of treating fevers, based upon his own observations). Fevers had a much greater relative importance in his time than at the present day, since he estimated that they made up two-thirds of medicine. In our own day the same class of maladies, called in official returns zymotic diseases, are credited with only one-tenth of the total mortality from all causes. The book was written in Latin, as were all of Sydenham's books, contained one hundred and fifty-six pages, and was dedicated to the Hon. Robert Boyle, philosopher and man of science. It was divided into four sections: I. On Continued Fevers; II. On Certain Symptoms which Accompany Continued Fevers; III. Intermittent Fevers; IV. Smallpox. Very few books were written in English in those days. "Surgeons and quacks might write in English, but for an orthodox physician to do so would have been an act of bad

taste almost amounting to a crime." Sydenham wrote a very beautiful preface to his fever book. It shows us in an instant the inner, sensitive, lofty soul of the man—his "religio medici" —the deep, sincere, religious undercurrent swaying all his feelings, and the noble lofty ideals he set for himself in his life's own foot-path. "Whoever applies himself to medicine," it reads, "ought seriously to weigh the following considerations: First, that he will one day have to render an account to the Supreme Judge of the lives of sick persons committed to his care. Next, whatever skill or knowledge he may, by Divine favor, become possessed of, should be devoted above all things to the glory of God and the welfare of the human race. Moreover, let him remember that it is not any base or despicable creature of which he has undertaken the cure. For the only-begotten Son of God, by becoming man, recognized the value of the human race and ennobled by His own dignity the nature He assumed. Finally, the physician should bear in mind that he himself is not exempt from the common lot, but subject to the same laws of mortality and disease as others; and he will care for the sick with more diligence and tenderness if he remembers that he himself is their fellow sufferer."

Sydenham's book, it may be imagined, made quite a stir in those days of few books and fewer discoveries, for it contained much of vital importance to sick, suffering humanity. It was William Harvey's story, served again with extra trimmings by the critics. Some rose up and called him "blessed;" others —a certain Henry Stubbe principally—condemned him with scathing bitterness. This Stubbe, a physician at Warwick, had been at Oxford with Sydenham, and enjoyed somewhat of a reputation as a Greek scholar. He assailed Sydenham's smallpox theory especially. Sydenham thought that smallpox was due "to a spontaneous effort of the blood to bring itself into a new state, and—putting off its native state by a process like moulding—to put on, as it were, a new shape." Stubbe criticizes him thus in his lines beginning: "Whether Dr. Sydenham intend to ascribe sense, appetite and judgment unto the blood, I cannot well tell, but either he canteth in metaphors or explaineth himself in his general hypothesis about Feavers as if his meaning were such. But it seems strange and irrational to attribute such an understanding to the blood, and to transmute a natural agent into one that is spontaneous; and, which is more, having represented it as such, to make it so capricious as not to know when it is well; but to run phantastically upon such dan-

gerous changes as occur in putrid feavers and the smallpox, for even this last 'ariseth from a desire the blood hath to change its state.'"

To be sure the theories of a Sydenham do not look well now beside our own very modern ideas. He made the same mistakes of other contemporaries, but he left a strong foundation for a more perfect building than was to be evolved out of his own mental architecture. However, his book was well received. In the same year it was reprinted in Amsterdam, and Sydenham was by far better appreciated in foreign countries than in his own England. It was the eternal story all over again —the prophet forced to seek glory and appreciation under alien skies, far away from the familiar faces whose smile would have meant so much to him. Schacht, Professor of Leyden, recommended the work to his students. Ettmuller of Leipsic, Spon of Lyons, and Dolaeus, an encyclopædic writer on medicine later on, often spoke a good and cheering word of "the fever-curing doctor." In 1668, a second edition appeared, with an added chapter on the plague. On the first pages of the book appeared a long Latin poem, written by John Locke, one of Sydenham's intimates—a word of praise for honest, conscientious research. We quote a few lines of the lengthy poem below:

"With Fever's heat, throughout the world that raged,
Unequal war has mourning Medicine waged;
A thousand arts, a thousand cures she tries;
Still Fever burns, and all her skill defies,
Till Sydenham's wisdom plays a double part,
Quells the disease and helps the failing Art.
No dreams are his of Fever's mystic laws,
He blames no fancied Humor as its cause;
Shunning the wordy combats of the Schools,
Where an intenser heat than Fever rules.
. . . . . .
Thy arms, Victorious Medicine! more intend,
Triumphant, thou the unconquered Plague shalt end,
Live, Book! while Fever's vanquished flames expire,
Thee and the world await one common fire."

In 1676 appeared a third edition, and in 1685, a fourth. Many new editions and other changes crept into the volumes. Numerous observations on London epidemics from 1661-1675 were added. It contained lines on measles, quinsy, scarlatina, etc. "With all deductions," writes one, "this work will always remain one of the greatest of medical classics. The descriptions of many diseases and symptoms are so admirable and complete that they have never been surpassed nor are likely to be. Many

flashes of insight and pregnant hints might be collected which contemporaries did not understand, and to which later knowledge is only able to do justice. Above all, the resolute endeavor to study natural facts by pure observation, putting aside the theories, facts and fictions collected out of books, which he says 'have as much to do with treating sick men as the painting of pictures has to do with the sailing of ships'—this endeavor, successful or not, will always be the best example of method to all students of medicine."

Up to this time, Sydenham's writings all referred to acute diseases. Requests now poured in from all corners, asking him to write something on chronic diseases. In 1680, he published his "Epistolæ Responsoriæ duæ"—answers to some letters which he had received pertaining to the treatment of certain diseases. The first of the letters contains these charming lines. What a noble mind this Sydenham must have had! "I have always thought," he writes, "and not without reason, that to have published for the benefit of afflicted mortals any certain method of subduing even the slightest disease was a matter of greater felicity than the untold riches of a Crœsus. I have called it a matter of greater felicity; I now call it a matter of greater goodness and of greater wisdom. For what more abundant instance of wisdom and goodness can any one display than (seeing his own share of our common nature) to continually refer such things as he has accomplished, not to his own glory, but to the advantage of the world at large, of which he is so small and contemptible a particle? I agree with that illustrious master of language and thought, my favorite Cicero, the leading spirit of his age, if not of the world at large, that 'as laws place the welfare of all men above the welfare of the individual, so a good and wise man, obedient to the laws, and mindful of his duty as a citizen, will think more of being useful to men in general than to any one or to himself.'"

In 1682, appeared another letter, "Dissertatio Epistolaris," addressed to Dr. Cole of Worcester, an authority on apoplexy in his day. The letter deals in part with the treatment of smallpox and hysteria. Sydenham gives us an almost perfect picture of this common disease. "Tractatus de Podragra et Hydrope" appeared in 1683—a treatise on gout and dropsy. On the title page is a quotation from Bacon—Sydenham's favorite author: "Non fingendum aut excogitandum, sed inveniendum, quid Natura faciat aut ferat" (We have not to imagine or to think out, but to find out what Nature does or

produces). In this book, also, appear the following lines, so characteristic of Sydenham, and which give us a view, along other lines, into the noble character of the man: "It is my nature," he says, "to think where others read; to ask less whether the world agrees with me than whether I agree with the truth; and to hold cheap the rumor and applause of the multitude. And what is it, indeed? Is it any great thing for a man to do his duty as a good citizen, to serve the public to his own private loss, and to make no glory for doing so? If I take a right measure of the matter, I am now so old that to study my own reputation will soon be as if I studied the reputation of one who is not. For what can it profit me after my death if the eight letters which compose the name Sydenham should pass from mouth to mouth among men who can no more form an idea of what I was, than I of what they will be; of men who will know none of those (then dead and gone) of the generation before them; who will use other language and have other manners; such is the inconstancy and vicissitude of all things human."

The treatise on gout was by far the more important book of the two, and is looked upon as Sydenham's masterpiece. He himself suffered from the disease for thirty-four years. "The Gouty Physician," he was often called. No wonder, then, that he gave us so true a picture of the malady. "It may," he writes, "be some consolation to those sufferers from this disease, who, like myself and others, are only moderately endowed with fortune and intellectual gifts, that great kings, princes, generals, admirals, philosophers, and many more of like eminence have suffered from the same complaint and ultimately died of it. In a word, gout, unlike any other disease, kills more rich men than poor, more wise than simple. Indeed, Nature, the mother and ruler of all, shows in this that she is impartial and no respecter of persons; those who are deficient in one respect being more richly endowed in another; her munificent provision for some men being tempered by an equitable proportion of evil. Hence, that law universally recognized that no man is 'ex omni parte beatum' nor yet, on the other hand, in all respects miserable. And this mixture of good and evil, especially appropriate to our frail mortality, is perhaps the best thing for our happiness."

In another part of the book Sydenham oddly says that the best beverage for gouty persons is "one which neither rises to the generosity of wine nor sinks to the debility of water, such as London small beer; but water, pure and uncooked, is dangerous."

Some writers have expressed surprise at not finding mention of Harvey and his great discovery anywhere in Sydenham's writings. Sydenham, as is well known, paid little attention to anatomy and physiology. They were perfect strangers to him almost—unimportant as far as his own thinking went, and it is said that he often spoke of the researches made in these branches with contempt. But he did not, however, totally disregard anatomy. He held that a physician ought to know the structure of the human body. One writer has called him "one-sided" on this account.

In 1684, Hans Sloane, afterwards the founder of the British Museum, having completed his studies abroad, returned to London with a letter of introduction to Sydenham. The letter said in part that he was "a ripe scholar, a good botanist, a skilful anatomist." Sydenham read the letter quickly, then he sent a hard look into the young man's face. "This is all very fine," he blurted out, "but it won't do! Anatomy—botany! Nonsense! Sir, I know an old woman in Covent Garden who understands botany better, and as for anatomy, my butcher can dissect a joint fully as well. No, young man, all this is stuff; you must go to the bedside; it is there alone you can learn disease."

"Schedula Monitoria de Novæ Febris Ingressu" (a sketch by way of warning of the approach of a new fever) was Sydenham's last work. It was published in September, 1686. The volume contained a chapter on calculus and a perfect description of St. Vitus' dance, or chorea—the dancing mania of the Middle Ages, "Sydenham's chorea," it is called to-day in our text-books on medicine. In the closing lines of the book he states that he has now delivered nearly all that he knows respecting the cure of diseases.

In Sydenham's day, there was a certain Gideon Harvey, physician in ordinary to Charles II., a man of sound education, whose special delight it was to write scurrilous attacks on other physicians. Sydenham also fell a victim to his ridicule. He refers to him as "a trooper turned physician," and again as "a Western Bumkin that pretends to Limbo children in the smallpox by a new method." Very few escaped Harvey's caustic remarks—the anatomist and physiologist were both subjects of his burning but witty criticism. Listen to him in the following lines—rather an amusing picture of the doctor at divine service! "The church door shall no sooner be opened but 'ecce!' Mr. Doctor, sitting in the most visible seat, Grave,

Deaf, Dumb and immovable as if an Apoplexy of Devotion had seized him, out of which his Apothecary is to raise him by knocking at half sermon at his pew door to fetch him away post haste to a dying patient; by which means he draws the eyes of the whole congregation after him; but instead of going to the pretended House of Visitation they both drop into a cabaret, there to pass the fatigue of a forenoon Sunday. This knack of confederacy is to be repeated several days, until it hath made an impression on the people, that he is a man of importance and of great Physick business."

Very few pen-pictures of Sydenham's personality are at hand. The following, by one of his biographers, may, however, give the reader an idea of his warmth of character: "Thomas Sydenham, as we judge from his portraits, was of a large and robust frame, his complexion reddish, his eyes gray, his hair first brown, afterwards gray, worn long, in its natural state, without a wig. For his actual features we refer to the portrait. We suppose him to have been in his manner manly and simple, but, perhaps, somewhat rustic rather than polished and conciliatory—more the manner of a Dorsetshire squire and captain of horse than that of a courtly physician. He was essentially a man of action when most physicians were men of books. We can imagine him taking command of the sick-room and having his orders obeyed, with a rough word or two if things went wrong. He undoubtedly gained the most complete confidence of his patients; of this there is abundant evidence. But it would have been by his plain honesty and benevolence and the ascendancy of a strong nature rather than by pleasing and flattering. In his treatment he was eminently straightforward."

Sydenham all his life remained a reader of books—Latin principally. He called Cicero "the author I most admire as the great teacher both in thought and language, the first genius of his own and, perhaps, of all ages." Then there were Homer, Lucian, Virgil, Horace, Juvenal, Seneca and others—all friends of his in his silent hours.

It cannot be denied that Hippocrates, Bacon and Cicero had a formative influence upon Sydenham's writings. He adopted the medical system of Hippocrates, and through all his writings one comes across quotations from the old master—"the divine old man." But Sydenham went further. He made new inroads into the undiscovered fields of thought and observation. Others lay on the hilltop dreaming, filled with a sweet content-

ment; but he went down into the valleys to hear the strong, beautiful messages springing up everywhere like flowers in the springtime, and we know he learned many a secret from the willing lips of Nature. In short, he was "the first who explicitly laid down the principle that diseases should be studied by the natural history method, like natural objects, without trying to explain them." Sydenham's idea was: "Investigate first, explain afterwards if you like; but remember that nature is always something very much greater than all your explanations."

Francis Bacon, "that great genius of rational nature," also lived next door to Sydenham's heart. Real man of science that he was, Sydenham always mentioned his name with great love and admiration. And, then, of course, there was Cicero, whom he loved deeply and read always.

In this sketch it will also be interesting to touch, in passing, upon two of Sydenham's great friends—the real men of action who came in contact with him, whose heart-throbbings spoke to him more strongly than words could ever do. His most interesting friends without a doubt were Hon. Robert Boyle, great man of science, and John Locke, physician and philosopher and Fellow of the Royal Society. Boyle and Sydenham were about the same age; both were Baconian to their heart's core and both were wedded to original research. Locke was somewhat younger in years than Sydenham, but such a friendship as that which existed between these two great physicians must have certainly been a congenial one. They often extended to each other a helping hand in the preparation of manuscripts for publication.

Sydenham's last days were uneventful. He must have been the father of a family, for in his will we see mention of his two sons, Henry and James. We must conclude, also, that his home life was everything that could be desired, for he always speaks of his family in words of strong endearment. His wife, it is thought, preceded him, as there is no mention of her in his will. Provision is made, however, for her mother, Mrs. Gee. We have reason, also, to believe that Sydenham's professional practice was a large one, and that he numbered many distinguished persons amongst his patients. Several attacks of gout and calculus helped to make his last days miserable. For years he dieted carefully, drove a great deal in the open air, and retired early. It is said of him also that often on an evening he could be seen at his open window in Pall Mall with a pipe

in his hand, enjoying the solace of his usual smoke. Like Milton, his contemporary, he evidently loved the weed.

The last writing Sydenham did was on September 29th, 1686. "Although my advanced age and constitution," he wrote, then, "broken by continual maladies, might have seemed rightly to demand release from the labor of thought and intense meditation, yet I cannot refrain from endeavoring to relieve the suffering of others even at the expense of my own health." These were the opening lines in his "Schedula Monitoria"—his last work given to an anxious, critical world. Then the ink in his ink-pot dried up, the pen rusted and the great physician laid it down forever. Death came to him quietly three years later, in his sixty-fifth year, December 29th, 1689, at his house in Pall Mall. Nearly a century and a quarter later, the College of Physicians, to perpetuate the memory of the gentle physician, placed above his grave a tablet bearing the following inscription :

"Prope Hunc Locum Sepultum Est
Thomas Sydenham
Medicus In Omne Aevus Nobilis
Natus Erat A.D. 1624,
Vixit Annos 65.
Deletis Veteris Sepulchri Vestigiis
Ne Rei Memoria Interiret
Hoc Marmor Poni Jussit Collegium
Regale Medicorum Londinense
A.D. 1810 Optime Merito."

Proceedings of Societies.

BRITISH MEDICAL ASSOCIATION.

The Seventy-fourth Annual Meeting of the British Medical Association will be held at Toronto, Canada, on Tuesday, Wednesday, Thursday, Friday and Saturday, August 21st, 22nd, 23rd, 24th, and 25th, 1906.

PROGRAMME.

President.—George Cooper Franklin, F.R.C.S. (Eng.), L.R.C.P. (Lond.), Surgeon Leicester Infirmary, Leicester.

President-elect.—Richard Andrew Reeve, B.A., M.D., LL.D., Dean of University of Toronto Faculty of Medicine.

Chairman of Council.—Henry Wm. Langley Browne, M.D., Ch.B., F.R.C.S.E., Consulting Surgeon, West Bromwich District Hospital.

Treasurer.—Hy. Radcliffe Crocker, M.D., F.R.C.P., Physician Skin Department, University College Hospital, London.

An address in Medicine will be delivered by James Barr, M.D., F.R.C.P., F.R.S.E.

An address in Surgery will be delivered by Sir Victor Horsley, F.R.C.S., F.R.S.

An address on Obstetrics will be delivered.

The scientific business of the meeting will be conducted in twelve sections, as follows:

Medicine.—President, Sir Thomas Barlow, Bart., K.C.V.O., London; Vice-Presidents, Dr. Alex. McPhedran, Toronto; Dr. James Stewart, Montreal; Hon. Secretaries, Dr. R. D. Rudolf, Toronto; Dr. J. T. Fotheringham, Toronto.

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State Medicine.—President, Dr. F. Montizambert, Ottawa; Vice-Presidents, Dr. C. Sheard, Toronto; Dr. P. H. Bryce, Ottawa; Hon. Dr. Pyne, Toronto; Hon. Secretary, J. Langrill, Hamilton.

Obstetrics and Gynaecology.—President, Dr. Freeland Barbour, Edinburgh; Vice-Presidents, J. A. Temple, Toronto; A. H. Wright, Toronto; Wm. Gardner, Montreal; Hon. Secretaries, Frederick Fenton, Toronto; K. C. McIlwraith, Toronto.

Therapeutics.—President, Professor D. W. Finley, M.D., Aberdeen; Vice-Presidents, J. L. Davison, Toronto; A. D. Blackader, Montreal; Hon. Secretaries, V. E. Henderson, Toronto; C. P. Lusk, Toronto.

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Psychology.—President, Professor W. T. Mickle, London, Eng.; Vice-Presidents, Dr. N. H. Beemer, Toronto; Dr. C. K. Clarke, Toronto; Hon. Secretaries, Dr. A. T. Hobbs, Guelph; Dr. G. W. Howland, Toronto.

Ophthalmology.—President, Mr. Marcus Gunn, London; Vice-Presidents, Dr. G. H. Burnham, Toronto; Dr. J. W. Stirling, Montreal; Hon. Secretaries, Dr. J. M. MacCallum, Toronto; Dr. D. McLennan, Toronto.

Laryngology and Otology.—President, Dr. Dundas Grant, London; Vice-Presidents, Dr. G. R. McDonagh, Toronto; Dr. H. S. Birkett, Montreal; Hon. Secretaries, Dr. D. J. Gibb Wishart, Toronto; Dr. Geoffrey Boyd, Toronto.

Anatomy and Physiology.—President, Professor B. C. A. Windle, M.D., F.R.S.; Vice-Presidents, Professor A. B. Macallum, Toronto; Professor A. Primrose, Toronto; Professor J. Wesley Mills, Montreal; Hon. Secretaries, Dr. C. B. Shuttleworth; Dr. G. S. Cleland.

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ronto; Hon. Secretaries, Dr. Arthur Wright, Toronto; Dr. J. S. A. Graham, Toronto; Dr. E. Stanley Ryerson, Toronto.

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INTERNATIONAL MEDICAL CONGRESS.

The Fifteenth International Medical Congress will assemble at Lisbon, Portugal, during the week from the 19th to the 26th of April, 1906. The official language of the Congress will be French, but in the general sessions, as well as in the meeting of sections, in addition to French, English and German will be made use of. There will be in all seventeen sections.

The President is Conz Costa Alemao, and the Secretary-General is Professor Miguel Bombarda, of Lisbon, to whom all general communications regarding the reading of papers may be addressed.

Most of the countries will be fully represented at the Congress through the National Committees. For the United States Dr. Jno. H. Musser, of Philadelphia, is President, and Dr. Raymon Guiteras is Secretary.

The Executive Committee of the Canadian Medical Association has appointed Dr. A. McPhedran as President, and Dr. W. H. B. Aikins as Secretary for Canada to act in conjunction with the International Committees of the Congress.

It is desirable that the Canadians who propose to attend this Congress should put themselves in communication as soon as possible with either of the above named, and it is hoped that Canada will have a large representation at this meeting, as it will be the first International Congress at which Canada will have national representation.

Physician's Library.

A Manual of Diseases of Infants and Children. By JOHN RUHRAH, M.D., Clinical Professor of Diseases of Children, College of Physicians and Surgeons, Baltimore. 12mo volume of 404 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Canadian agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Flexible leather, $2.00 net.

Dr. Ruhrah is to be congratulated upon the production of a manual that presents the subject of pediatrics in such a clear yet concise manner. He has outlined the therapeutics of infancy and childhood in a way that cannot fail to make for this work a place of first importance in its field. He has given explicit instructions for dosage and prescribing, and a number of useful prescriptions are appended. Infant feeding is given in detail. All the illustrations are practical, and include three inserts. A very valuable feature consists in the many references to pediatric literature so selected as to be easily accessible by the student, enabling him to ascertain the sum of knowledge on any given disease. We give Dr. Ruhrah's work our unqualified recommendation.

A Text-Book of Physiology, for Medical Students and Physicians. By WILLIAM H. HOWELL, Ph.D., M.D., LL.D., Professor of Physiology, Johns Hopkins University, Baltimore. Octavo volume of 905 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Cloth, $4.00 net; Half Morocco, $5.00 net.

Dr. Howell's many years of experience as a teacher of physiology in several of the leading medical schools is evident throughout the entire work in the simple and clear style and in the practical handling of his subject. The author has laid main emphasis upon those facts and views which will be directly helpful in the study of general pathology and in the practical branches of medicine. At the same time, however, we are gratified to see that Dr. Howell has not ignored the experimental side of the

subject. This we consider very important, for it has been through individual research that all the great advances in physiologic knowledge have been made. The entire literature of physiology has been thoroughly digested and the important views and conclusions incorporated. Indeed, the author has prepared a text-book which, while preserving the scientific spirit, is at the same time simple and modern in presentation. Every notable advance in physics or chemistry as influencing physiology has been carefully noted. Illustrations have been most freely used, greatly helping in understanding and supplementing the descriptions in the text. Especially valuable are those illustrations employed to make clear the more intricate anatomic and physiologic mechanisms. Altogether, we consider it a very valuable book, because it is accurate, up-to-date, and highly practical.

A Treatise on Diseases of the Skin. For the use of advanced Students and Practitioners. By HENRY W. STELWAGON, M.D., Ph.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Fourth Edition Revised. Handsome octavo of 1,135 pages, with 258 text-illustrations, and 32 full-page lithographic and half-tone plates. Philadelphia and London: W. B. Saunders & Company, 1905. Canadian Agents, J. A. Carveth & Co., Limited, 434 Yonge St., Toronto. Cloth, $6.00 net; Sheep or Half Morocco, $7.00 net.

Four large editions of Dr. Stelwagon's work have been required in three years. Surely such a sale bespeaks a book of unusual merit. Notwithstanding the frequency of editions, Dr. Stelwagon has not lost this opportunity to bring his book up to the latest knowledge. The therapeutic use of the Rontgen rays, high-frequency current, and Finsen light have been accorded the increased attention their growing importance deserves. We notice the addition of new text-cuts, some thirty-eight in number, and six additional insert plates, all up to the high standard set by the text. The author, by the judicious elimination of redundant material, has kept the size of his book much as before, the increase being only some twenty pages. Indeed, it is remarkable the epigrammatic way that Dr. Stelwagon has of saying things—a thing most desirable both in text-book and a reference work for the busy practitioner.

Blakiston's Physician's Visiting List for 1906. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

Explanation of Sizes and Editions: Regular Edition—The 25 patient list has one page dated for each week of the year; price, $1.00. The 50 patient list has two pages dated for each week of the year; price, $1.25. The 50 patient style may also be had bound in two volumes; price, $2.00. The 75 patient list has three pages dated for each week, and is bound in two volumes; price, $2.00. The 100 patient list has four pages dated for each week, and is bound in two volumes; price, $2.25.

Perpetual Edition—No. 1 has space for 1,300 names; price, $1.25. No. 2 has space for 2,600 names; price, $1.50. The Perpetual Edition is the same as the Regular Edition, but without dates. It can be started at any time, and used until full.

Monthly Edition—In this edition two opposite pages are devoted to each month, so that the name of the patient must be written but once during that period. This style in plain leather binding without flap; price, 75 cents. With leather cover, pocket and pencil; price, $1.00.

Following the Visiting List proper you will find special memoranda pages, pages for addresses of patients, nurses, vaccinations, Obstetric engagements, births, deaths, bills and accounts asked for, cash account, etc.

Opposite the title page you will find a list of these styles and prices.

We would call your attention to the Dose Table and other valuable information in the front of each book.

Movable Kidney.—By C. W. SUCKLING, M.D. (Lond.), M.R.C.P., Consulting Physician to the Queen's, to the Children's, and to the Orthopedic and Spinal Hospitals, etc. London: H. K. Lewis.

According to Dr. Suckling, this disease is, in some cases, a cause of insanity, headache, neurasthenia, insomnia, mental failure and other disorders of the nervous system, and a cause also of dilatation of the stomach. The book opens with a concise note on the literature of the movable kidney, and then discusses the following: Normal kidney, movable kidney, symptoms of movable kidney, treatment by belts, treatment by operation and cases, failures and visit to public lunatic asylum. Altogether, Dr. Suckling treats his subject interestingly, though, perhaps, all may not readily subscribe to his teachings.

Cleft Palate and Hare Lip.—By W. ARTHBUTHNOT LANE, M.S., F.R.C.S., Surgeon to Guy's Hospital, and Senior Surgeon to the Hospital for Sick Children, Great Ormond Street. Price, 5s. London: The Medical Publishing Co., Limited.

This monograph on cleft palate and hare lip, which is issued in quarto form, from a typographical standpoint is excellent. As the *British Medical Journal* puts it, it is indeed "a sight for sore eyes," as the type is quite large, there being twenty-six lines to a page. It embraces a description of the original operative procedure designed by Mr. Lane, and which he has employed in several hundred cases, as well as a summary of the various papers which have appeared from time to time from his pen on the subject. The illustrations are clear, quite numerous and skilfully executed.

Taylor's Physician's Pocket Account Book.—By J. J. TAYLOR, M.D., Philadelphia: Published by The Medical Council, 4105 Walnut Street, Philadelphia.

The introduction to this handy and very useful book gives directions for its use and then some practical advice on keeping and collecting accounts. The business suggestions will be found all right. Anyone using a book of this character saves a great deal of time and trouble in book-keeping.

Neurotic Disorders of Childhood.—Including a Study of Auto and Intestinal Intoxications, Chronic Anemia, Fever, Eclampsia, Epilepsy, Migraine, Chorea, Hysteria, Asthma, etc. By B. K. ROCHFORD, M.D., Professor of Diseases of Children, Medical College of Ohio, University of Cincinnati; Pediatrist to the Cincinnati Good Samaritan and Jewish Hospitals; Member of the American Pedriatic Society, Association of American Physicians, etc. New York: E. B. Treat & Company.

We have examined this volume with considerable interest and profit. It embraces a series of papers which the author contributed a few years ago to the *Archives of Pedriatics*, on "Some Physiological Factors of the Neuroses of Childhood." In addition there are the chapters on disease as referred to above. These latter are intelligently written and are quite practical. There is a chapter on Excessive Nerve Activity, from which we have taken the privilege of drawing some nourishment for editorial remark. We can heartily recommend this book as worthy of patronage.

Disorders of Metabolism and Nutrition—Diabetes Mellitus. By PROFESSOR DR. CARL VON NOORDEN, Physician-in-Chief to the City of Frankfort a. M. New York: E. B. Treat & Co.

The authorized American translation of this, as of the rest of the series (this being Part VII.), has been edited by Boardman Reed, M.D., Philadelphia. The present volume deals with Diabetes Mellitus, its Pathological Chemistry and Treatment, and are the Herter Lectures delivered by the distinguished author in the University and Bellevue Hospital Medical College, New York. Of necessity these lectures could only be heard by a few American physicians, but the balance of the profession are indebted to Dr. Reed and the publishers, who now place them in tangible form before the profession of this continent. The price of the book is only $1.50.

We have just received from W. B. Saunders & Company, of Philadelphia, the widely known medical publishers, an unusually attractive illustrated catalogue of their complete list of publications. It seems to us, in glancing through this catalogue, that a list of the Saunders authors is a census of the leading American and foreign authorities in every branch and specialty of medical science. And new books are being added and new editions issued with a rapidity that speaks well for the success and progressiveness of the house. While comparisons are always odious, still we feel it but justice to say that, in the presentation of facts about the book listed that a probable buyer wishes to know, and also for beauty and durability of mechanical get-up, this catalogue surpasses anything we have heretofore seen. It is truly representative of the house. We understand a copy will be sent free upon request.

The Canadian Medical Protective Association

ORGANIZED AT WINNIPEG, 1901

Under the Auspices of the Canadian Medical Association

THE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure black-mailing.

The Association affords a ready channel where even those who feel that they are perfectly safe (which no one is) can for a small fee enrol themselves and so assist a professional brother in distress.

Experience has abundantly shown how useful the Association has been since its organization.

The Association has not lost a single case that it has agreed to defend.

The annual fee is only $2.50 at present, payable in January of each year.

The Association expects and hopes for the united support of the profession.

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Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

The province of Ontario has ever been to the fore as regards its public school system; and now that the province has a Minister of Education who is a physician and, therefore, can appreciate some matters in connection therewith, more than others, and having in mind also the fact that the entire school system of the province is to be enquired into at a near-by date, a consideration of one aspect of the subject which is of very material value will be timely at this instant. The subject has been brought to our attention at this particular moment by what is virtually a "sweating" system, using the term in no figurative sense. A boy of twelve, after his attendance at school regularly, has two or three hours of nightwork assigned him to prepare at home, and the result is that he has been having profuse night-sweats, and the cause can be traced to nothing but excessive nerve activity. This has been amply proven by withdrawing the boy from his studies when the night-sweats ceased. This continuous brain-work and nerve excitement would in time break and forever damage the constitution of all except the very hardiest; and the

process is even in them a decidedly dangerous as it is most certainly a pernicious one. This villainous cramming system is well known to medical men as a strong etiological factor in the production of hysteria, chorea and other nervous disorders, to say nothing of undermining the physical health of the child and so preparing the way for other serious ailments. One question for a Commission on Education to enquire carefully into would be as to how these baneful influences which are on the increase and constantly working havoc with the nervous systems of school children could be guarded against; and no doubt any such enquiry should go along the lines of educating parents, guardians, nurses, and especially the teachers themselves, particularly in our large cities, of the danger of continually subjecting the immature nervous systems of these young children to the constant excitement, strain, and mental activity, which is the accompaniment of our common school education. Dr. William Townsend Porter has probably investigated and given more study to the influences of school life, which go to produce these all too common neuroses of childhood, than any one else. His extensive researches demonstrate that children who are advanced in their studies have greater weight, greater height and greater girth of chest than those who are not so far advanced in their studies but of the same age. He would establish then a physical as well as a mental examination, and would prohibit the entrance of a child into a given class until his mental and physical condition corresponded to his associates in that class. A child physically weak will not be, in the great majority of instances, capable of keeping pace with his class, and in the effort to do so will be all too often spurred on by appeals to his young ambitions and possibly by threats of physical punishment, both tending to work upon an already over-tried nervous system, and hence the calamitous results. As Dr. Porter then points out, there should be a great deal of importance attached to a methodical examination of the physical system as well as the mental, which still further emphasizes the need of medical inspection in the schools of the large cities where our social systems have assigned more excitement, strain and mental activity than in the quieter rural districts. It is the opinion of well-informed neurologists that such a system would be a preventive measure of the greatest value, and that many children would be thereby spared from the clutches of many neuroses. There is another factor which must not be lost sight of and which tends to act as a fore-runner to neurotic diseases. The seats in our schools, the desks, the light, the ventilation are

all designed to produce health and physical well-being; and we presume, there is the ever-watchful eye of the teacher to correct any abnormal positions. At home with two or three hours of nightwork, where all these prime and essential factors are neglected, the good that may be accomplished in the day-time is counteracted at night, and thus the evil cycle proceeds on its way. Time and again, physicians, as well as others, have had exhibited to them clever, "precocious" children who, in later life, turned out to be physical nervous wrecks or subjects of tubercular disease; and so the desire for mental strength predominates the desire for physical strength to the infinite disaster of both. The subject is one which may well commend itself to any Commission the Government may choose to issue, and is one which may possibly properly be met by a wise system of medical inspection of schools, especially in towns and cities.

The site which has been mentioned for the new Toronto General Hospital, inasmuch as it is on a prominent car-line, and may some day have another alongside its western or eastern boundary, seems not to be an ideal one. Rest and quiet are often two good productive factors in hastening a return to normal health, and in the location of a hospital should have careful and full consideration. Street cars dashing past when making a stethoscopic examination of either the heart or lungs cannot be very conducive to proper examination; and patients when distracted with pain crave for quietude.

The Medical News, New York, makes editorial announcement in its Nov. 11th issue, that after the first of the year the publication of that journal will be assumed by the publishers of the *New York Medical Journal,* which only a few years ago attached the *Philadelphia Medical Journal* to itself. It is sixty-two years since the well-known house of Lea Brothers & Company founded *The Medical News*, and it has had an honorable career and has been a credit to American medical journalism. The merger makes of the *New York Medical Journal* a powerful consolidation of three well-known medical journals, and will, no doubt, be appreciated by its numerous subscribers. It is understood that Dr. Frank Foster, the veteran medical editor, will continue to be editor-in-chief of the consolidated journals.

Gonorrhea is a disease in the treatment of which every one has had his successes as well as his failures. The reason for this may lie in the fact that most may be prone to forget at times to treat the patient for gonorrhea, and consequently fall into routine treatment of the disease. It is said to be a self-limited disease and that, without any other treatment than rest in bed, diet and hygiene, a complete cure will be effected in from five to eight weeks. If such be the case, all the best—and there is no best—treatments are of practically no more use than, and probably not as much, as hot water. Medicines have been given internally and by injections galore; urethral irrigation has been practiced and the result is that we get no nearer than telling our patient that he cannot be cured under, practically, six weeks Like some one said once of rheumatism, the best cure for this disease is " six weeks." And a writer in the *Buffalo Medical Journal* has had experience and so states his dictum. It is certaily not to our credit and is humiliating to have to tell a patient that we cannot effect a cure under six weeks, the prescribed time in all text-books, and about the time from all practical experience. Every physician will tell you, as he has told the patient, that if he takes to bed and rests, a cure will most likely result the sooner. But what patient will take to his bed? None. Because rest in bed being recognized by the profession as an essential factor to effect a rapid cure, is not insisted upon; for the physician, instead of ordering all the treatment, practically allows the patient to order the most important part of it, simply because the patient does not think he is sick enough to go to bed, and naturally shrinks from the ever-inquisitive friend: " What's the matter with you?" As one of the social diseases, then, which all surgeons know causes unlimited damage to numberless women, to say nothing more of its far-reaching and disastrous influence, is the profession doing its proper duty by treating patients with this disease as it now does? Should they, when the disease accomplishes in such short time such hellish ravishes in womankind, continue to be assistants to their patients in the treatment of their disease? In practically no other disease does the patient hold the whip-hand; for it amounts to that. The general principle of REST in this disease whilst recognized as of essential importance cannot be enjoined upon the patient until it has become an established and a universal practice by the profession.

An interesting and instructive article appears as our initial paper this month. It is on " Trachoma and Immigration—Our

Detention Hospitals," and is contributed by Dr. J. D. Pagé, the medical superintendent of the Quebec Immigrant Hospital. As practitioners all over Canada may be called upon at any time to treat a case of trachoma on account of the fact that the disease may be disseminated through immigrant pedlars who have gotten into the country before the immigration laws were as strong in this respect as at the present time, we would specially commend this article to their attention. That the Canadian Government is now doing good work in this matter through their chief medical officer in the Department of the Interior, Dr. P. H. Bryce, may be seen from the fact that during the navigation season of 1904, 800 immigrants were sent to the Detention Hospital at Quebec, and 300 immigrants deported. During the season of 1905 something like 700 have been deported. So well have the officers of the Government done their work that a case of trachoma is now a rarity in the hospitals of Montreal, though Winnipeg seems yet to have a little more than her share.

The following clipping from *Scientific American* on the eyesight test for railroad men practiced in the United States, may be of interest to our readers as well as to those of them who practice similar tests for the Canadian companies: First, reading test —three-eighths inch type at a distance of twenty feet; secondly, tests for position of form, consisting of models of semaphores placed in various positions at a distance of twenty feet; third, reading test for ordinary text, such as train orders, at an ordinary reading distance; fourth, color sense, which is tested, first in daylight by displaying strands of worsted of over a hundred varieties of color, and having the men name the colors displayed, and second in a darkened room by displaying glasses of different colors in front of a lantern. Finally, the hearing is tested at a distance of twenty feet by having the men note the strokes of an acumeter and repeat (conversation test) words given by the examiner. The men are re-examined at the end of three years from the last examination, and also after any accident in which they may have been present, after illness and before promotion. This system has been in force in the United States for ten or twelve years on most of the leading roads, and on some, longer, and has given good satisfaction to the railroads.

News Items.

SEVENTY babies died in Toronto in November.

AN outbreak of smallpox is reported near Sudbury.

THE deaths in Toronto in November numbered 293.

ST. JOHN, N.B., is to have a fine new private hospital.

THERE were 411 births registered in Toronto in November.

SMALLPOX has developed in Sydney, near the town of Belleville, Ont.

DR. THOS. WYLIE, Ex.-M.P.P., has been appointed an associate coroner in Toronto.

DR. WM. J. BANNISTER, late of Cork, Ireland, has commenced practice in Winnipeg.

THE York County Council will give a large donation to the Toronto General Hospital.

DR. MCGIBBON, of Bracebridge, has been appointed an associate coroner for Muskoka,

DR. W. E. STOREY, of Walkerville, has been appointed a coroner for the county of Essex.

PNEUMONIA and tuberculosis caused the deaths of fifty-eight persons in Toronto in November.

DR. DOW, formerly of Fergus, and Dr. Stevens, an old Grand Valley boy, are located in Regina.

HAMILTON, Ont., will raise $35,000 by by-law for completing a new wing to its General Hospital.

TYPHOID fever in Ontario during the month of October numbered 336 cases with 47 deaths.

ANOTHER $5,000 has been contributed to the Toronto General Hospital by three prominent citizens.

DR. B. H. LEMON, of Thorold, was found dead in his bed on the morning of the 28th of November.

ONLY four deaths occurred in Stratford, Ont., during November. There must be good doctors in Stratford.

DR. E. DE ARCY AULT, Acton, Ont., has been appointed an associate coroner for the county of Halton.

FROM January 1st to October 31st there were 3,635 patients cared for in the Winnipeg General Hospital.

DR. J. E. GEMMILL, a former resident of Winnipeg, is dead at Rush City, Minn.

THE death is announced at Toronto of Dr. Herman L. Cook, formerly of Napanee, Ont.

A NEW Maternity Hospital was opened by His Excellency the Governor-General on December 1st in Montreal.

DR. W. J. MACDONALD, one of the C Company South African Veterans, has located in practice at St. Catharines, Ont.

OF the $250,000 required for the new Alexandra Contagious Diseases Hospital, Montreal, $130,000 has been subscribed.

DR. WILLIAM OSLER has been appointed one of ten delegates to supervise the publications of the University of Oxford press.

MR. P. C. LARKIN, one of the Trustees of the Toronto General Hospital, has presented the hospital with six wheeled stretchers.

THE total number of patients treated in the Winnipeg General Hospital during the week ending the 25th of November, was 369.

DR. AUGUSTA-STOWE GULLEN, Toronto, has been re-elected President of the Ladies' Board of the Western Hospital, Toronto.

TYPHOID fever is continuing to abate in Winnipeg, the number of cases for November being much less than for the same month in 1904.

DR. HARPER WILSON, who has been surgeon to the Crow's Nest Coal Company, at Fernie, B.C., has commenced practice in Winnipeg.

DR. NORQUAY, Winnipeg, has been appointed assistant medical superintendent at the Provincial Hospital for the Insane at Brandon, Man.

DR. ALEX. MURDOCK, of Brucefield, has returned from Scotland, where he has been taking a post-graduate course; he has been away for nearly two years.

DR. BRUCE SMITH, Inspector of Hospitals in Ontario, states that fifty per cent. of the inmates of Canadian asylums are drawn from the farming communities.

THE Ontario October health report shows that there were 63 cases of smallpox, with no deaths, as against 1 case and no deaths in October of last year.

AT the fall medical examinations of the Ontario Medical Council there were thirty-three candidates taking the primary and forty-five the intermediate and final.

THERE were 190 cases of diphtheria in Ontario, in October, with 29 deaths; 93 cases of scarlet fever with 1 death; and 170 cases of consumption with 163 deaths.

AT the last meeting of the London Medical Association, Dr. H. A. McCallum presented a case of "Hypertrophic Pulmonary Osteo-arthropathy." Dr. E. Searborn reported on the same night a case of "Essential Dropsy" of unusual interest. The Association adopted a tariff of fees.

A COMMITTEE has been formed to take charge of the Toronto New Hospital scheme. Dr. Hoskin and Dr. Reeve will represent Toronto University on this committee.

DR. H. ANDERSON, who was associated with Dr. Brien, of Essex, a year ago, has passed the examination before the Medical Council of Manitoba, and will locate in Winnipeg.

DR. H. BASCOM and Dr. Walls have decided to form a partnership for the practice of their profession in Uxbridge and vicinity. Dr. Bascom will occupy his own office and Dr. Walls will be found at the office lately occupied by Dr. Clark.

AN out-door clinic for consumptives has been established in connection with the Toronto General Hospital, and a nurse has been detailed to visit these patients at their homes and instruct them in the proper disposal of sputum, etc.

WHEN the new addition in course of erection, in connection with the Toronto Free Hospital for Consumptives, is completed there will be accommodation for from sixty to seventy patients. Children with tuberculosis, between the ages of six and twelve will be admitted.

THE following appointments are announced in the *Ontario Gazette:* Associate Coroners—Dr. Henry H. Moorehouse, 128 St. Patrick Street, for Toronto; Dr. John A. MacDonald, Markham, for York; Dr. James B. Coleridge, Ingersoll, for Oxford and Middlesex; Dr. Austin H. Speers, Burlington, for Halton; Dr. Anthony Ochs, Hespeler, for Waterloo.

AT a recent meeting of the General Medical Council of the United Kingdom, the President stated that the effect of the General Laurie amendment (1905) to the Medical Act would provide for the Provinces of Canada applying on their own behalf for admission to the privileges of medical reciprocity with the United Kingdom. He further stated that there was reason to hope that before long efforts would be made to obtain from great provinces like Ontario and Quebec a position in relation to the British Register similar to that enjoyed by the States of the Australian Commonwealth.

THE Montreal General Hospital thus voices its regret at the death of Dr. Buller: Resolved,—That the Board has heard with the deepest regret of the death of their late colleague, Dr. Frank Buller, who was identified with the Montreal General Hospital for many years, first, for eighteen years as ophthalmologist, and then for eleven years as consulting surgeon. Dr. Buller's great abilities, originality and capacity for work did much to advance the science of ophthalmology in Canada. His earnestness of purpose and great sincerity made him a most valuable member of the medical profession, whose interests he was always ready and willing to advance. His death is a great loss, not only to the medical profession but to the community at large.

Special Selection.

RESPIRATORY AFFECTIONS—SYMPTOMS AND THEIR TREATMENT.

By Justin Herold, A.M., M.D.

Former House Physician and Surgeon, St. Vincent's Hospital, New York City; Former Coroner's Physician, City and County of New York; Member of the New York County Medical Association, County Medical Society, Medical Society of the Greater City of New York, Medico-Legal Society, Society of Medical Jurisprudence, and New York Academy of Medicine.

Mathematical precision, it must be admitted, has its place no less in medicine than in its legitimate field in the study of the higher classics. This precision, in the therapeutic sense, applies to the exact dosage of preparations used by the busy practitioner in his every-day experience. How often do we attain proper results from the use of drugs; how often results that are not only improper, but even dangerous? Precision in dosage can only be obtained by constant study on the part of our co-laborer, the pharmaceutical chemist—study embodying experimentation, the comparing of results, re-experimentation, and, finally, the circulation of the decisive product in the hands of the practitioner.

The past few months have afforded me, and no doubt others, opportunities to test the efficacy of the therapeutic qualities of the various remedies vaunted as certain to relieve the harassing symptoms attendant on the diseases produced by the bacillus of that nineteenth-century infant, "La Grippe."

I refer to this epidemic particularly, because it had not manifested itself in such virulent form since the memorable grippe epidemic of 1889. The author of this paper, in the past few months has had occasion to employ the several preparations recommended for the relief of the distressing respiratory symptoms attendant upon "la grippe." These manifestations, from my view-point, have been characterized principally by cough and dyspnea, in other words, "dyspneic cough." Expectorant mixtures, anodyne solutions, together with hypodermic medication produced in me a disgust; and why? Simply and undeniably for the reason that the ordinary cough mixtures contain the opium preparations in such combinations as to leave a depressing effect, which, especially in cases of the grippe of the "depressing

or melancholic" type, enhances the already depressed feeling. Combinations of expectorants with stimulating ingredients had no less the same effect.

The feelings of the physician are not heightened when his "stand-bys" serve him so poorly; neither are the feelings of the patient calculated to give him increased confidence in his physician. Where lies the fault—in the opium, in the morphine, in the codeine, in the heroin? No, the fault lies in the unstable (or whatever you may call it) combination, or ill-combined ingredients. In seeking for a remedy to relieve the harassing night cough of an attack of "bronchitis due to grippe," in a number of my own family, I chanced to come across a preparation of heroin, which, of all remedies tried, gave relief. I refer to Glyco-heroin (Smith).

Glyco-heroin, in all the cases in which I have used it, has never caused vomiting, an important point for the physician. Is not the stomach the physician's best friend in the treatment of diseases other than obstructive or malignant affections? Another important point noted was that this preparation of heroin —Glyco-heroin (Smith)—never played pranks with the structures composing the vaso-motor system. Now, what do we, in treating disease, want in addition to a good stomach and a stable nervous attachment? We want rapid action. That I effected through the use of Glyco-heroin.

You cannot produce toxic effects with this preparation, as its effects are lasting, and in most cases do not necessitate the use of the drug at very frequent intervals. Glyco-heroin allays cough, without doubt better than any remedy I have used this winter. And that without the sometimes disastrous results of other preparations of the papaver group. Respiration is stimulated, not in number, but in the depth of the respiratory act; thus full and complete oxygenation takes place, an important adjunct to the helpful effects of drugs in general, and saving the patient that expensive tank of oxygen. Given full and complete oxygenation, all other symptoms must accordingly diminish; thus temperature and pulse-rate are reduced to a normal condition. Elimination of noxious products not being interfered with, the excretion of urine is brought to the normal under the use of Glyco-heroin. It is well known that diminished quantity of urine follows as a result of inflammatory tissues of the respiratory tract; thus the standard quantity of urine is enhanced by the judicious use of Glyco-heroin. In the case of tuberculosis it acts not only as a respiratory sedative, but also as a stimulating expectorant, as the following case will attest:

CASE I.—*Pulmonary tuberculosis, stage of cavities.*—W. B. C., aged 28 years, suffering from cough, expectoration, emaciation, loss of appetite, loss of sleep, inability to lie in certain positions, of eight years' duration, weight 122 pounds. Physical examination revealed a number of cavities in both lungs, although the laboratory tests did not show any tubercle bacilli. Guaiacol, arsenic, eucalyptus, ichthyol, and creosote benefited him but imaginatively. Glyco-heroin in doses of one teaspoonful every two hours, to start with, to be taken from 8 a.m. to 6 p.m., benefited him to such a degree that, to quote from his letter to me, he "gained four pounds in four weeks." Lungs appear to take on a better action as regards respiration, thus giving him, indirectly, proper sleep, followed by the ability to eat with a relish. Coughs little at night; advised him to expectorate forcibly during day. Patient now finds relief by taking his doses every eight hours.

Now, why this beneficial action in tubercular disease, for this case was taken at random from my case-book, as are all the other cases? Simply because Glyco-heroin loosens cough, promotes the throwing off of the noxious material from the lung cavities, and thus gives relief, breathing becomes easy, oxygenation takes place with renewed vigor, and, by careful attention as regards regulation of dosage, patients of this class may live many years in comparative comfort as regards distressful symptoms.

CASE II.—*Acute laryngitis.*—George F. N., aged 14 years. Coasting, perspiration, and no overcoat, a good combination to bring on an actually inflammed laryngeal mucous membrane. Pain on swallowing, talks in whispers, temperature 101.5 deg. F., pulse 135, respiration 23, cough, barking like dog, uncomplicated case of laryngeal inflammation. Stokes' expectorant did not relieve, seemed to increase cough. Glyco-heroin, full doses of one teaspoonful every three hours, while producing much sleepiness, reduced inflammation, cough, and pain in three days. I then combined it with squills and syrup balsam tolu, to be given every four hours until completely relieved.

Glyco-heroin, in cases of laryngitis, seems to me to take the place of all heretofore vaunted sure cures without reservation. Vomiting from the use of opium, morphine, codeine, etc., always delays a cure in cases of laryngitis; not so with Glyco-heroin, which in my hands thus far has not produced vomiting.

CASE III.—*Chronic bronchitis, asthma, and emphysema.*—Mrs. H. D., aged 44, has had asthmatic attacks, every fall and spring, for the past eleven years; not in winter, but only at the beginning and end of seasons. Iodines, senega, squills, digitalis,

and cupping gave relief, but with the penalty of a return of more severe attacks. Dyspnea, cough and expectoration in this case was something frightful to witness. In this case, prompt hypodermic injection of 1-8 grain of morphia relieved somewhat, followed by the use of Glyco-heroin, one teaspoonful every hour for three doses, then every four hours, and on the third day every six hours. In this case the Glyco-heroin seemed to continue the effect of the morphia.

A new point in favor of Glyco-heroin is that it enhances the effect of morphia when given hypodermically. Although in seven other cases of asthma, with attacks similar to the above, Glyco-heroin was administered, in two-hourly doses, with the remarkable effect that the cough and dyspnea ceased within four hours.

Case IV.—*Pharyngitis.*—Miss D. F., aged 17 years, complained of fever, hoarseness, cough, and soreness in throat. Culture of reddened throat did not reveal any streptococci of Klebs-Lœffler bacilli. Glyco-heroin, given every three hours, cured in two days. The after-cough was removed in four more days, by the administration of Glyco-heroin in doses of one teaspoonful every six hours.

Case V.—*Acute bronchitis.*—Carl F., aged 22 years; chills, fever, soreness of throat, pain on swallowing; cough dry, no expectoration; Glyco-heroin, one teaspoonful every three hours, promoted expectoration, changed the character of the cough, and gave relief in a most happy manner. In my opinion there is no doubt that patient would have ended up in a pneumonia, unless he was relieved inside of 48 hours. As regards his cough, character of it was so completely changed that the bronchial disease seemed to "flow from him," as it were.

In whooping cough, 22 cases from my case-book show that I prescribed Glyco-heroin with permanent and speedy results, given in doses of five and ten drops, as indicated, to these little sufferers. It seemed to be borne well and efficaciously. Readers do not care much for the recital of cases; bare facts are meat from which all can subsist with profit. Glyco-heroin (Smith) is far superior to codeine, as sedative, in affections where a direct action upon the respiratory centre is looked for. For, certainly, its action must be direct where it is noted that respiration is deepened and prolonged. No vomiting, no nausea, no headache, no depressing of powers of mind or body, no untoward symptoms, Glyco-heroin is *par excellence* the remedy for conditions affecting the respiratory organs, whether in children or adults, in the weakly and in the strong.

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